ALPINE®

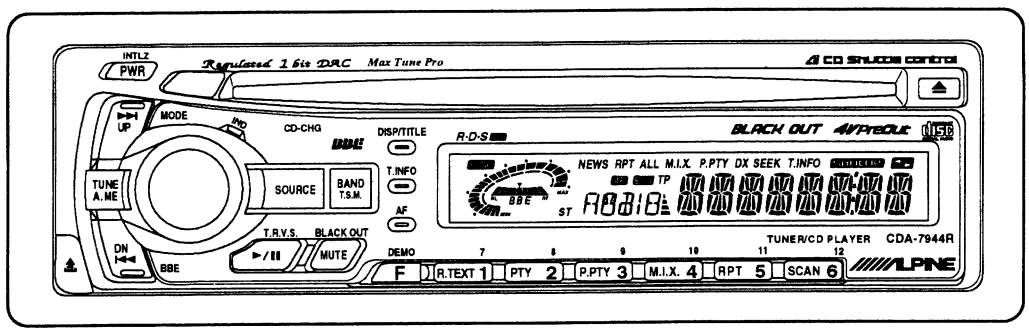
SERVICE MANUAL

FM/MW/LW Compact Disc Receiver

CD Shuttle Controller

COMPACT disc DIGITAL AUDIO

- For the CD deck mechanism parts (DP23L05A) of this model, refer to the Service Manual · DP-L SERIES · ADDENDUM & REVISED (III) (Part No. 68E26422S01).



(CDA-7944R)

CDA-7944R/ CDA-7842R

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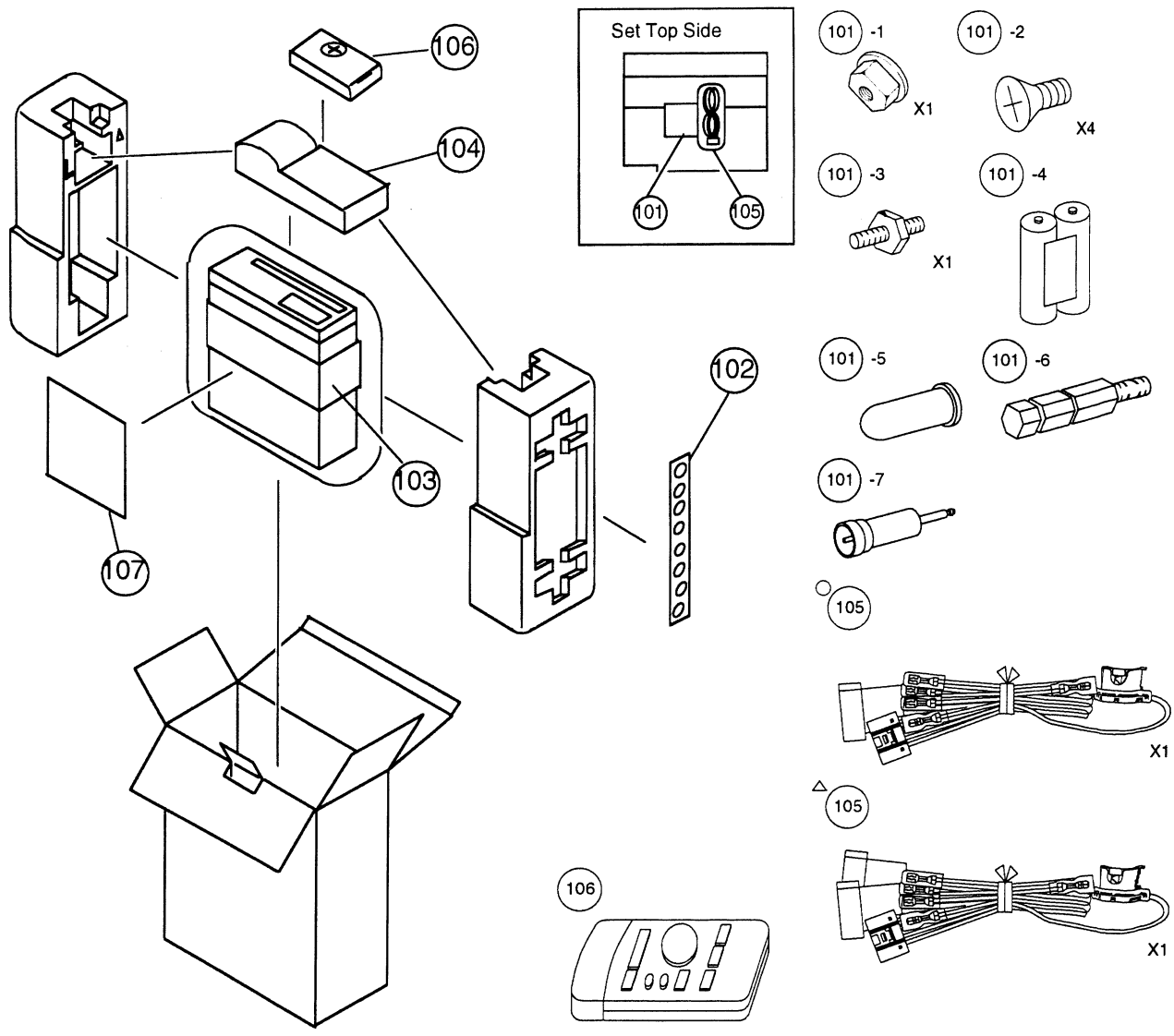
Packing Assembly Parts List

Symbol No.	Part No.	Description
101	01V13700Y74	Assy., Kit
101-1	02B47353F01	Nut, Hex. (M5)
101-2	03S72235F13	Screw, Countersink (M5X8)
101-3	46A42363F01	Stud, Bolt
101-4	60T55630W01	Battery, MGN R03 (NB) UM-4
101-5	36A11113W01	Cap, Rubber (A)
101-6	03A11112W01	Bolt, Hex. (M5)
101-7	01T15394Y02	Antenna, JASO-ISO
102	07B64552F01	Bracket, Strap Receiver
103	15D50406W01	Case, Inner

Symbol No.	Part No.	Description
104	15D10867Y01	Carrying, Case
○ 105	01T15359Y05	Assy., ISO Connector
△ 105	01T15359Y04	Assy., ISO Connector
106	01T00716K02	Assy., Remocon
107-1	68P10924Y40	Owner's Manual
107-2	68P10924Y42	Owner's Manual (I/G/S)

NOTE : ○ : For CDA-7944R Model Only, △ : For CDA-7842R Model Only, Others : Common.

Packing Method View



Specifications

<CD SECTION>

System ..... Optical (Compact Disc system)
Quantizing Bit Number ..... 16bit Linear system
Channels ..... 2 Channels
Channel Balance (1kHz) ..... 0±3dB
Distortion (1kHz) 0.1%
Frequency Response (Ref.1kHz) ..... 17Hz : 0±3dB
127Hz : 0±2dB
10.007kHz : 0±2dB
19.997kHz : 0±4dB
S/N Ratio 85dB
Separation (1kHz) 55dB
De-Emphasis (Ref. 1kHz) ..... 4kHz : -20±3dB
16kHz : -20±3dB

<FM RADIO>

Intermediate Frequency ..... 10.7±0.1MHz
Frequency Range ..... 87.5~108MHz
Usable Sensitivity (98.1MHz, Mono) 17.2dBf
-3dB Limiting Sensitivity (98.1MHz) 21.2dBf
S/N Ratio (98.1MHz, Stereo) 55dB
Image Rejection (106.1MHz) 40dB
IF Rejection (90.1MHz) 60dB
Distortion (Input 60dBμ, 98.1MHz) 0.7%
Frequency Response (98.1MHz, Ref. 400Hz) ..... 100Hz : 0±3dB
10kHz : -14±3dB
Stereo Separation (1kHz) 20dB
Residual Noise (98.1MHz, Ref. 400Hz) ..... 30±10dB
PS Sensitivity (98.1MHz) 36.2dBf

<MW RADIO>

Intermediate Frequency ..... 1st. : 10.7MHz
2nd. : 450kHz
Frequency Range ..... 531~1,602kHz
Sensitivity (20dB S/N, 999kHz) 40dB
S/N Ratio (999kHz) 44dB
Image Rejection (1,404kHz) 40dB
IF Rejection (603kHz) 50dB
Distortion (999kHz) 1.5%
Frequency Response (999kHz, Ref. 400Hz) ..... 100Hz : -3±4dB
2.5kHz : -3+3, -5dB

<LW RADIO>

Intermediate Frequency	1st. : 10.7MHz
	2nd. : 450kHz
Frequency Range	153~281kHz
Sensitivity (20dB S/N, 216kHz)	44dB
S/N Ratio (216kHz)	44dB
Image Rejection (270kHz)	35dB
IF Rejection (162kHz)	50dB
Distortion (216kHz)	1.5%
Frequency Response (216kHz, Ref. 400Hz)	100Hz : -3±4dB
	2.5kHz : -3+3, -5dB

<GENERAL>

Power Supply	DC14.4V
Power Output (T.H.D. 10%) /Impedance	16W/ch/4ohm (△)
Pre-Output Voltage/Impedance	1.6V/10kohm
Semiconductors	33IC's, 65Transistors, 33Diodes, 8Zener Diodes, 1FET (○)
	35IC's, 65Transistors, 41Diodes, 8Zener Diodes (△)
Dimensions (W×H×D)	Nose : 188×58×25.3mm
	Chassis : 178×50×158mm
Weight	1.5kg

NOTE : Due to Continuing product improvement, specifications and designs are subject to change without notice.
○ : For CDA-7944R Model Only, △ : For CDA-7842R Model Only, Others : Common.

Servo Monitor (Part No. 01E20845S01)

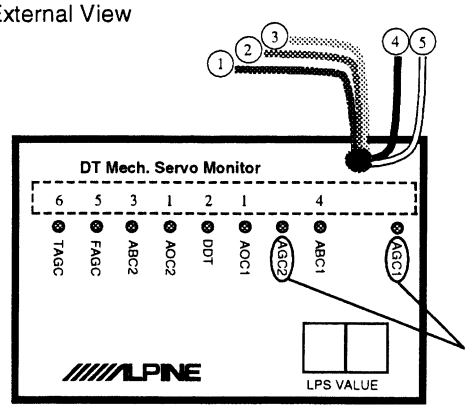
I. Purpose

DP-L mechanism built-in CDA-7944R/CDA-7842R Series performs digital signal processing in the insideof Digital Servo LSI and the outside alignment circuit builds in to this LSI and each alignments are automatic.

This DT Mechanism Servo Monitor is jig for the automatic alignment circuitry.
Please refer to the following list for the reference;

1. LED indicates the alignment.
2. Diagnosis of automatic alignment.
3. LED indicates a failure item for easy failure analysis of servo circuitry.

External View

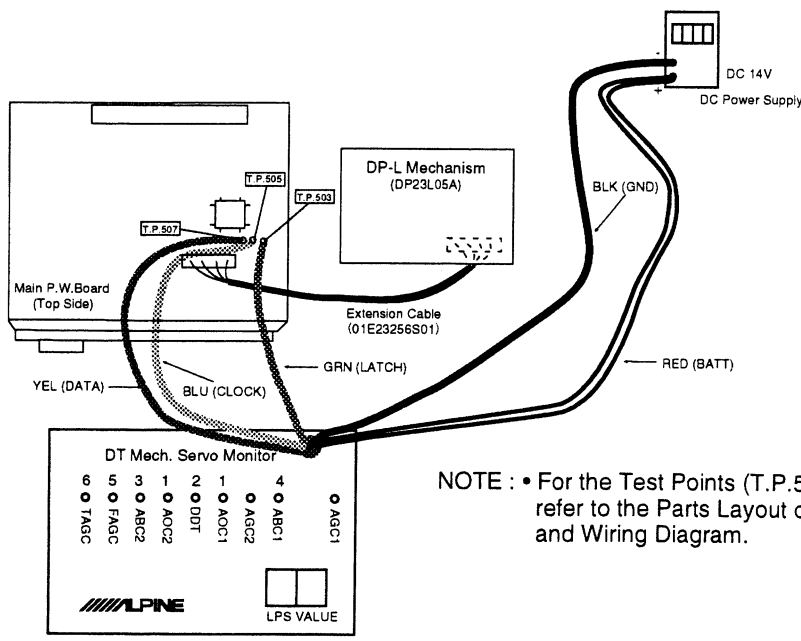


	①	②	③	④	⑤
Wire Color	Yellow	Green	Blue	Black	Red
Name	Data	CE	Clock	Ground	Battery

※ For this digital servo LSI, no adjustment was made.

* The numbers of the automatic alignment sequence.

II. Connection Points and Connection Method



NOTE : • For the Test Points (T.P.503, 505, 507), refer to the Parts Layout on P.W.Boards and Wiring Diagram.

Connect each of the wires to the Test point as illustrated in the diagram.

* Be very careful not to shorts the test points since they are located close together.

* DT Mechanism Servo Monitor can be used for the DP-L mechanism.

III. Operating Specifications

The automatic adjustment operations of the CDA-7944R/CDA-7842R Series are performed by output of the commands of the various adjustment items from the main microprocessor. Adjustments are performed in response to these commands by the digital servo LSI. This servo monitor jig receives the signal returned to the main microprocessor from the digital servo LSI and causes the LED to light or go off. The adjustment condition (of either completed or not yet completed) of the various adjustment items can be checked using the lighting condition of this LED. The following test discs are required for the good/fault judgment:

1. A-BEX TCD-721 (6th track - 1.2mm) : Scratch test disc
2. A-BEX TCD-782 : Signal test disc

Measures to be Taken Corresponding to the LED Indication

1. When a LED other than FAGC or TAGC lights, perform the fault causation analysis using the fault diagnosis chart according to the LED indication.

i) LED indications

Lit : Fault Unlit : OK

Adjustment Order	LED Name	Adjustment Order	Contents
1	AOC2	Tracking offset adjustment	Corrects the tracking error value as an offset.
	AOC1	Focus offset adjustment	Corrects the focus error value as an offset.
2	DDT	Disc detection	Detects the presence or absence of a disc.
3	ABC2	Tracking balance adjustment	Corrects the average value of the tracking error as a balance value.
4	ABC1	Focus balance adjustment	Correct until the RF level becomes maximum.
5	FAGC	Focus fine gain adjustment	Introduces external interference and adjusts the focus gain to an appropriate value.
6	TAGC	Tracking fine gain adjustment	Introduces external interference and adjusts the tracking gain to an appropriate value.

ii) Seven-Segment LED (LPS Value)

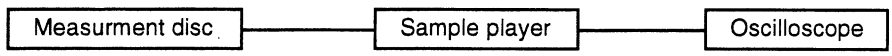
Not used since this model is a single CD player. Indication shows "00".

Measurements

A. RF Signal Level Measurement

The main beam of the returning light is received by the photodiode and the output voltage is obtained by current-voltage conversion of A+B+C+D.

1. Block Diagram



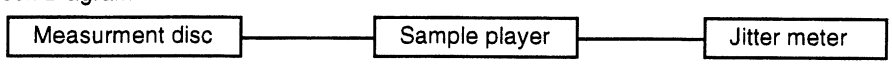
2. Measurement Method

(a). Connect the ground terminal of the oscilloscope VRO (TA2066F, pin 20) and measure the RFO signal (of TA2066F, pin 21).
(b). Play the first track of the measurement disc A-BEX TCD-782.
(c). Read the peak-to-peak value of the waveform.
Specification: 1.2+0.3, -0.2V
* When the value is outside of the specification (i.e., not good), check TA2066F and the pick-up.

B. Jitter Measurement

The standard deviation of the pulse width when a trigger is applied to the rising edge of the 3T component of the RF signal.

1. Block Diagram



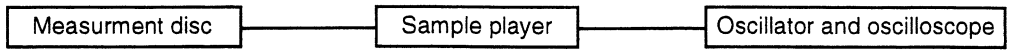
2. Measurement Method

(a). Connect the ground terminal of the jitter meter to VRO (TA2066F, pin 20) and measure the RFO signal (of TA2066F, pin 21).
(b). Play the first track of the measurement disc A-BEX TCD-782.
(c). Read the indicated value of the jitter meter.
Specification: 25nS or less
* When the value is outside of the specification, check TA2066F and the pick-up.

C. Focus Servo Gain Measurement

Measure the focus servo open loop gain in the servo-on (closed loop) condition.

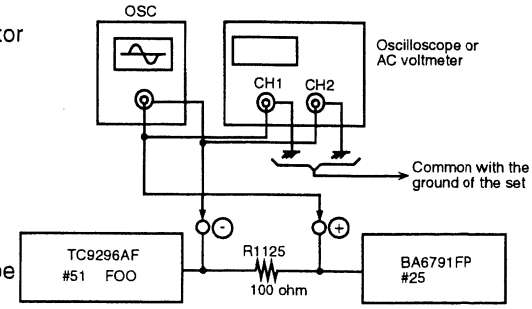
1. Block Diagram



2. Measurement Method using an Oscillator and an Oscilloscope

(a). Connect OSC output to resistor for gain measurement (100 ohm). (Connect a servo driver side to positive side.)
(b). Connect CH1 of oscilloscope to a servo driver side of resistor for gain measurement (100 ohm). (Connect negative side with GND of set.)
(c). Connect CH2 of oscilloscope to TC9296AF side of resistor for gain measurement (100 ohm). (Connect negative side with GND of set.)
(d). Play back the eighth track of A-BEX TCD-782 disc for measurement. (No sound recording track)
(e). Output frequency (1.2 kHz, 200 mVP-P) from OSC and compare the amplitude of CH1 and CH2 of oscilloscope and convert into dB.
Gain (dB) =20 Log (CH2/CH1)
Specification : Gain Normal if it is within 0±3dB.
* If the specificaiton is out (NG), TC9296AF (Digital Servo LSI) is malfunction.
NOTE: AC voltmeter is available to measurement.

3. Connection (Example)

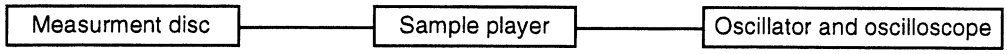


* FOO: Focus drive output

D. Tracking Servo Gain Measurement

Measure the tracking servo open loop gain in the servo-on (closed loop) condition.

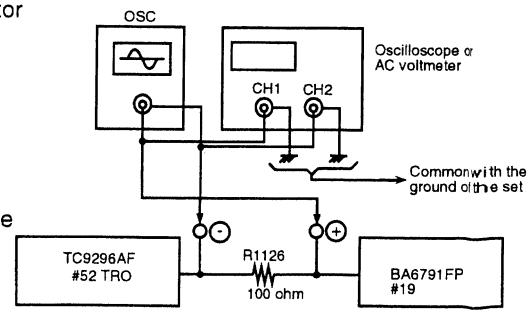
1. Block Diagram



2. Measurement Method using an Oscilloscope

(a). Connect OSC output to resistor for gain measurement (100 ohm). (Connect a servo driver side to positive side.)
(b). Connect CH1 of oscilloscope to a servo driver side of resistor for gain measurement (100 ohm). (Connect negative side with GND of set.)
(c). Connect CH2 of oscilloscope to TC9296AF side of resistor for gain measurement (100 ohm).
(d). Play back the eighth track of A-BEX TCD-782 disc for measurement. (No sound recording track)
(e). Output frequency (1 kHz, 50 mVP-P) from OSC and compare the amplitude of CH1 and CH2 of oscilloscope and convert into dB.
Gain (dB) =20 Log (CH2/CH1)
Specification : Gain Normal if it is within 0±3dB.
* If the specificaiton is out (NG), TC9296AF (Digital Servo LSI) is malfunction.
NOTE: AC voltmeter is available to measurement.

3. Connection (Example)

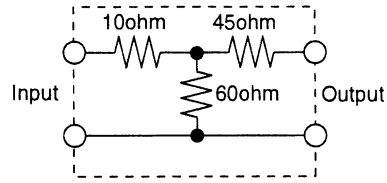


* TRO: Tracking drive output

Adjustment Procedures

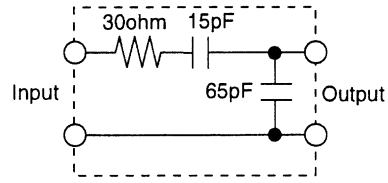
1. FM/AM SECTION

(1) Dummy Antenna Circuit



For 50 ohm FM Signal Generator

Figure 1



For 50 ohm AM Signal Generator

Figure 2

(2) Connections

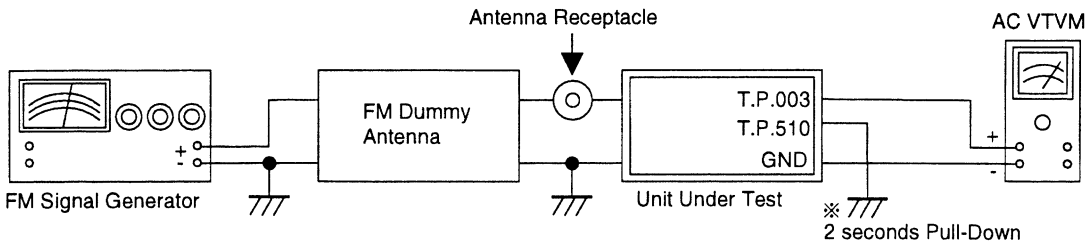


Figure 3

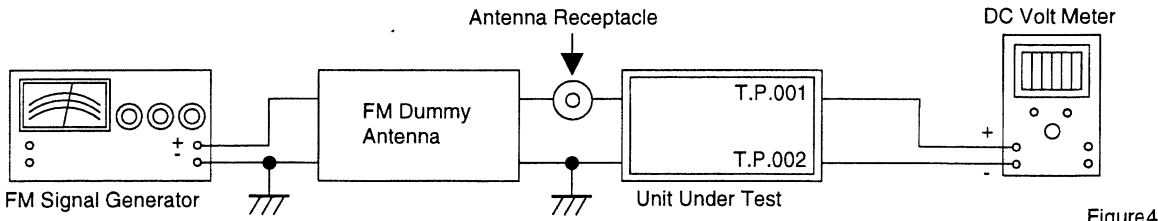


Figure 4

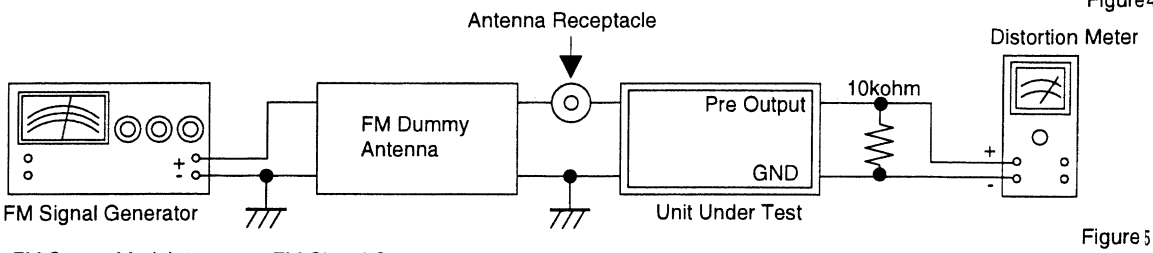


Figure 5

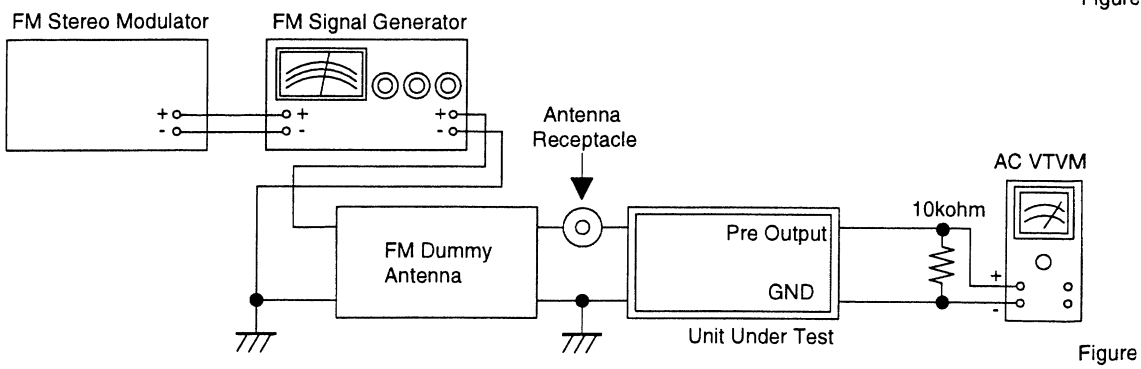


Figure 6

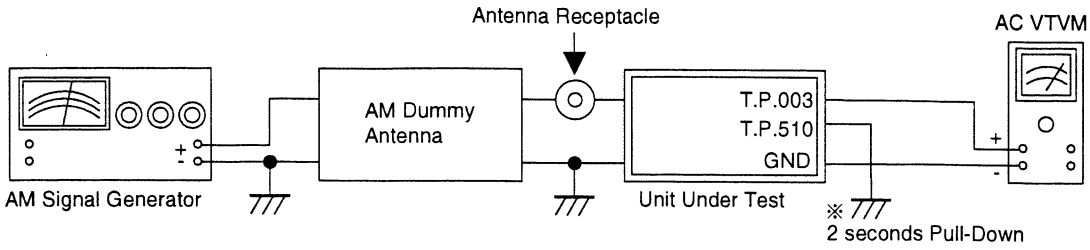


Figure 7

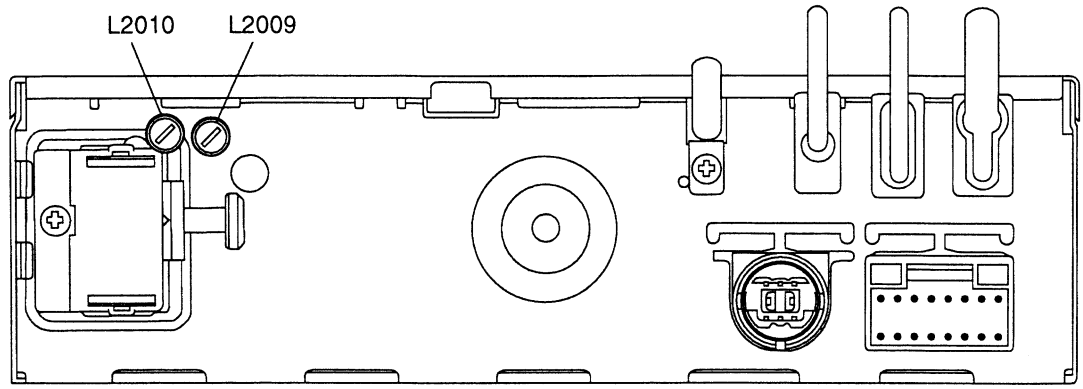
(3) Control Settings

Power Switch	ON	Bass Control	Center Position
Fader Control	Center Position	Band Switch	FM/AM (MW)
Balance Control	Center Position	BBE Switch	OFF
Treble Control	Center Position	Others	OFF

(4) Adjustment Procedures

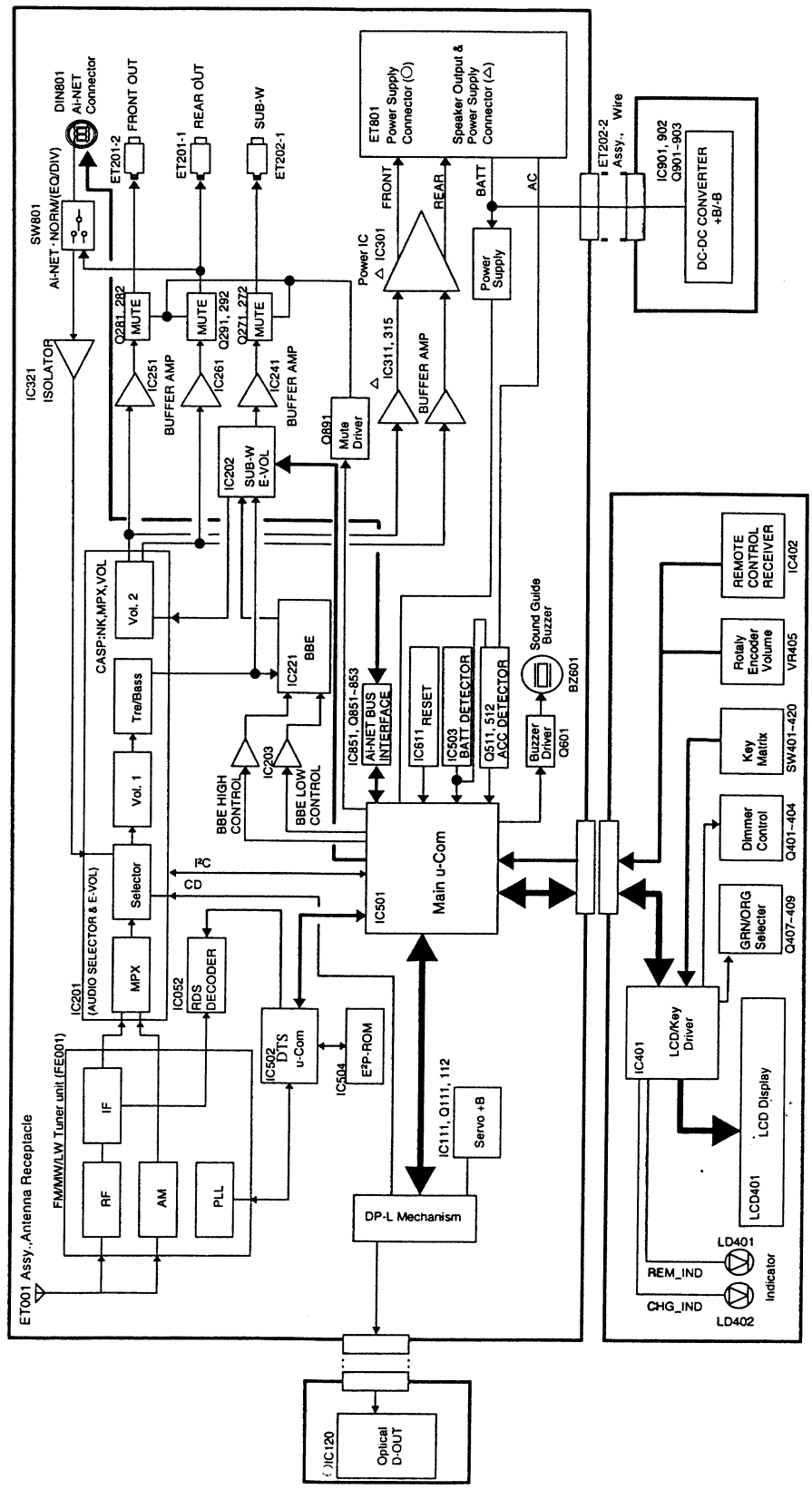
Step	Description	Connection	Signal Generator	Dial Control	Test Point / P.W.Board Coordinates	Adjustment
1	Signal Meter Auto Adjustment	Figure 3	98.1MHz, 52dBμ (Mod. OFF)	98.1MHz	T.P.003 (2-C) T.P.510 (2-C)	Auto Adjustment : After setting up of Signal Genarator, short GND and T.P.510 (Pull-Down) for 2 seconds.
2	IF Adjustment	Figure 4	98.1MHz, 72dBμ (Mod. 400Hz, Dev. 40kHz)	98.1MHz	T.P.001 (1-C) T.P.002 (1-C)	Adjust L2009 to 0±100mV.
3	Distortion Adjustment	Figure 5	98.1MHz, 72dBμ (Mod. 400Hz, Dev. 40kHz)	98.1MHz	Pre Output	Adjust L2010 to less than 0.7%.
4	IF Confirmation	Figure 4	98.1MHz, 72dBμ (Mod. 400Hz, Dev. 40kHz)	98.1MHz	T.P.001 (1-C) T.P.002 (1-C)	Confirm T.P.001 and T.P.002 output voltage is 0±100mV. (NG : Proceed same adjustment under Step 2.)
5	Separation Adjustment	Figure 6	98.1MHz, 72dBμ (Mod. 1kHz, Dev. 36kHz, Stereo, Lch only)	98.1MHz	Pre Output	Adjust VR201 to for Rch output to be minimum, and confirm Lch and Rch output level difference is more than 20dB.
6	AM Seek Stop Auto Adjustment	Figure 7	999kHz, 33dBμ (Mod. OFF)	999kHz	T.P.003 (2-C) T.P.510 (2-C)	Auto Adjustment : After setting up of Signal Genarator, short GND and T.P.510 (Pull-Down) for 2 seconds.

Adjustment Locations



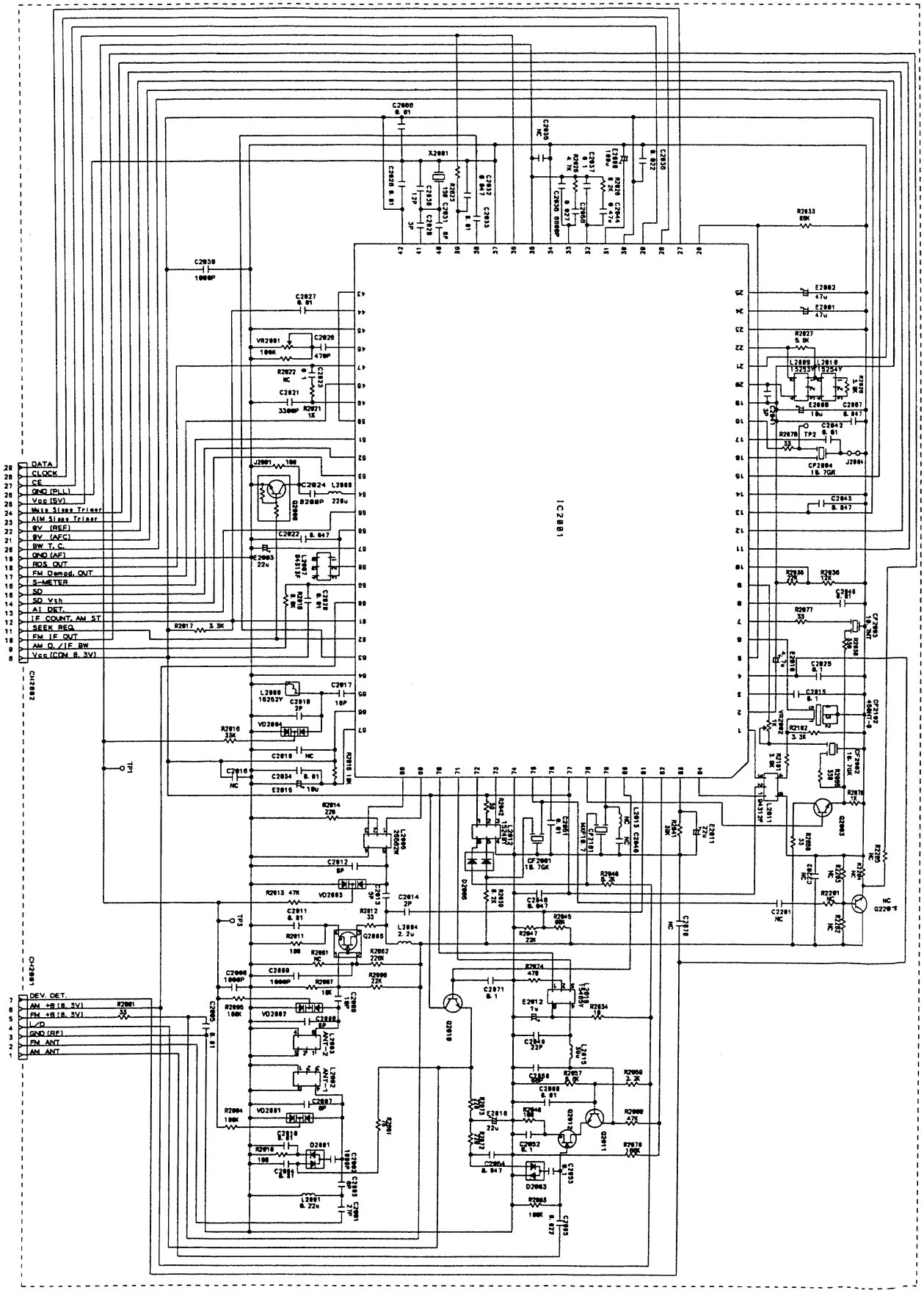
NOTE : For the Test Points (T.P.001~003, 510) and Adjustment Parts (VR201), refer to the Parts Layout on P.W.Boards and Wiring Diagram.

Block Diagram



NOTE : ○ : For CDA-7944R Model Only, △ : For CDA-7842R Model Only, Others : Common.

Tuner Schematic Diagram



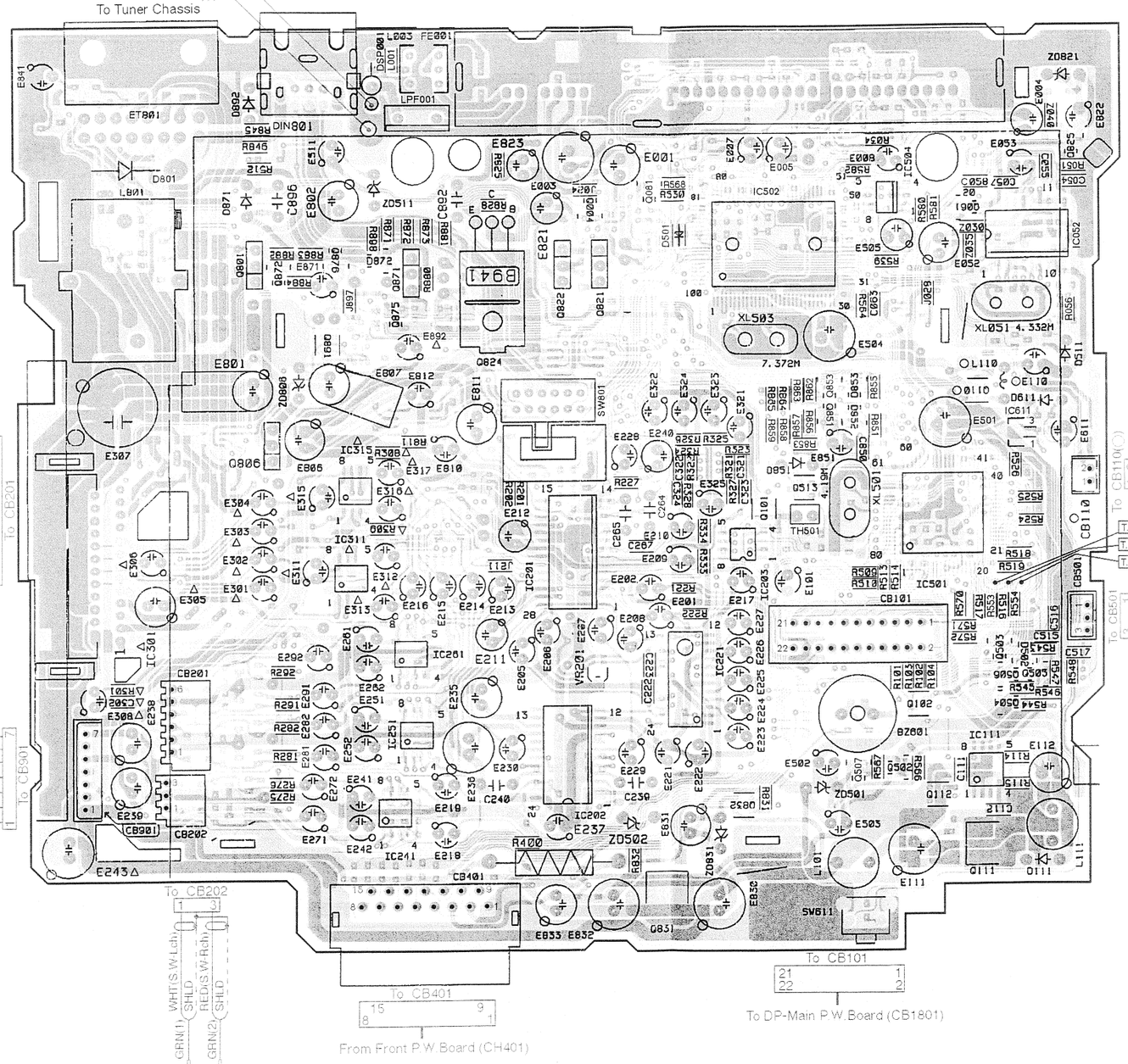
MEMO

Parts Layout on P.W. Boards and Wiring Diagram (1/4)

ET001
Assy.,Antenna Receptacle

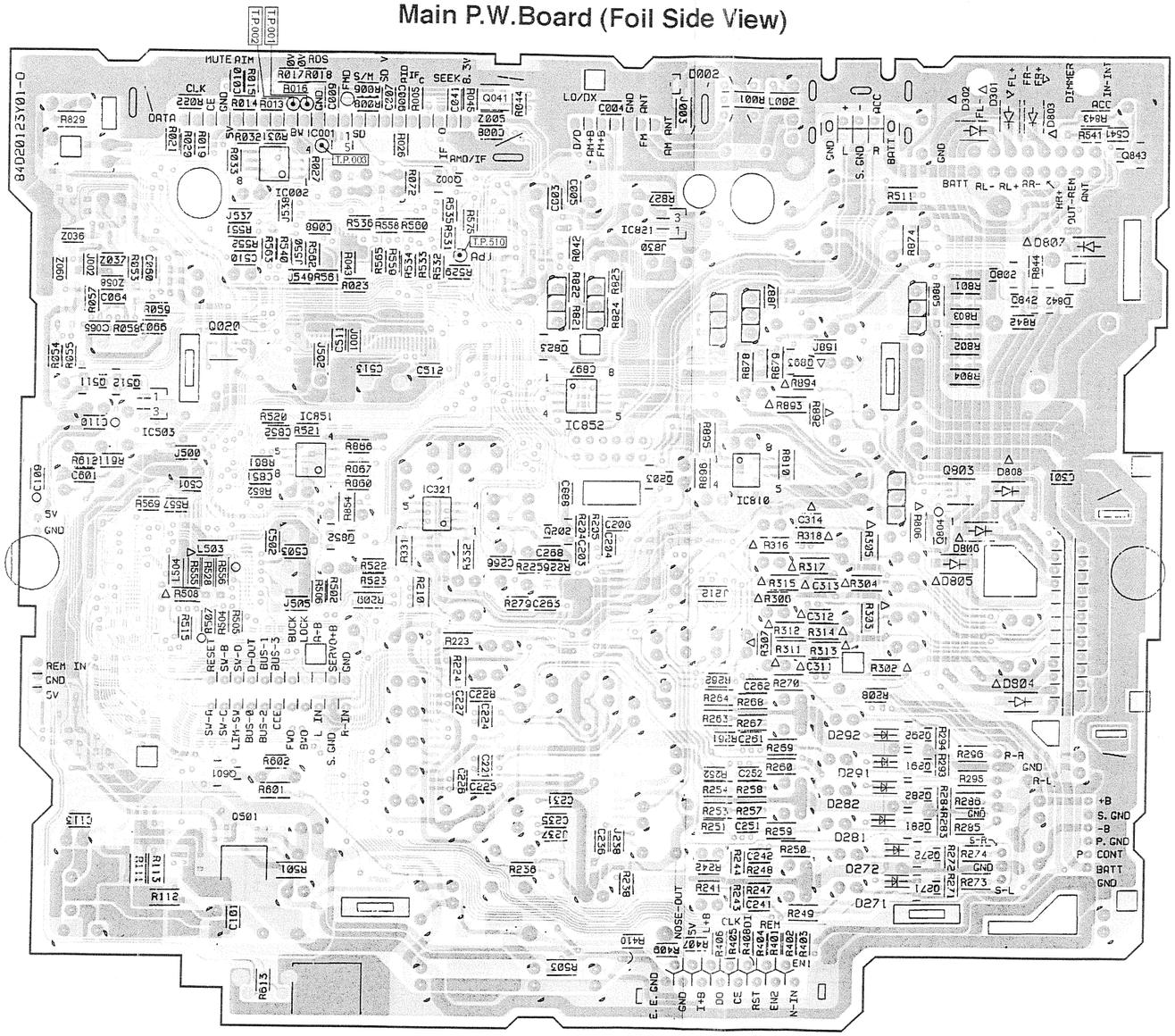
WHT(ANT.)
BLK
SHLD
To Tuner Chassis

Main P.W.Board (Component Side View)

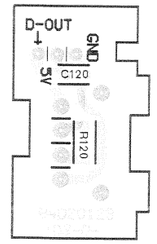


Parts Layout on P.W. Boards and Wiring Diagram (2/4)

Main P.W.Board (Foil Side View)



D-OUT P.W.Board (○) (Foil Side View)

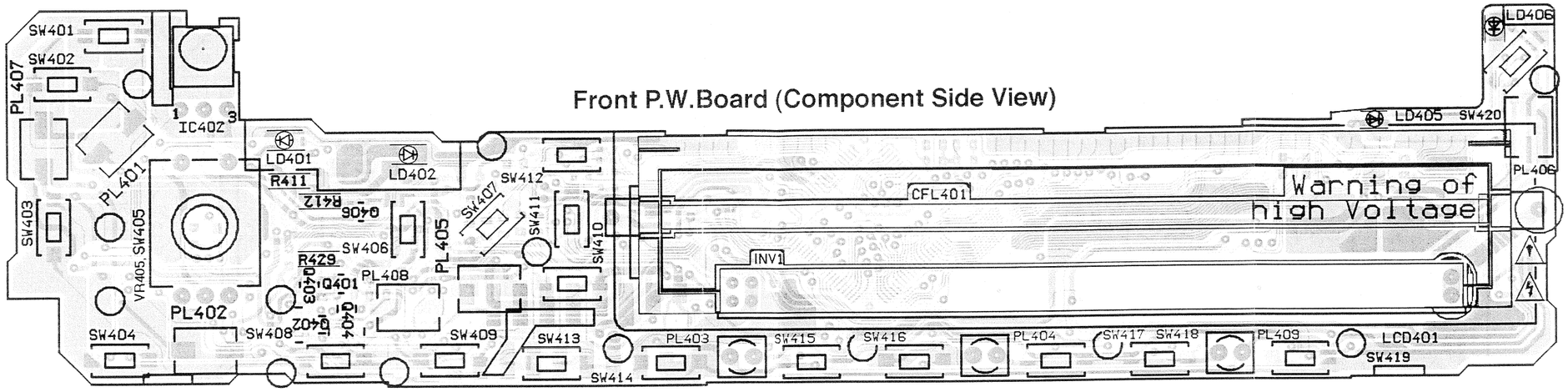


NOTE: ○: For CDA-7944R Model Only.
△: For CDA-7842R Model Only.
Others: Common.

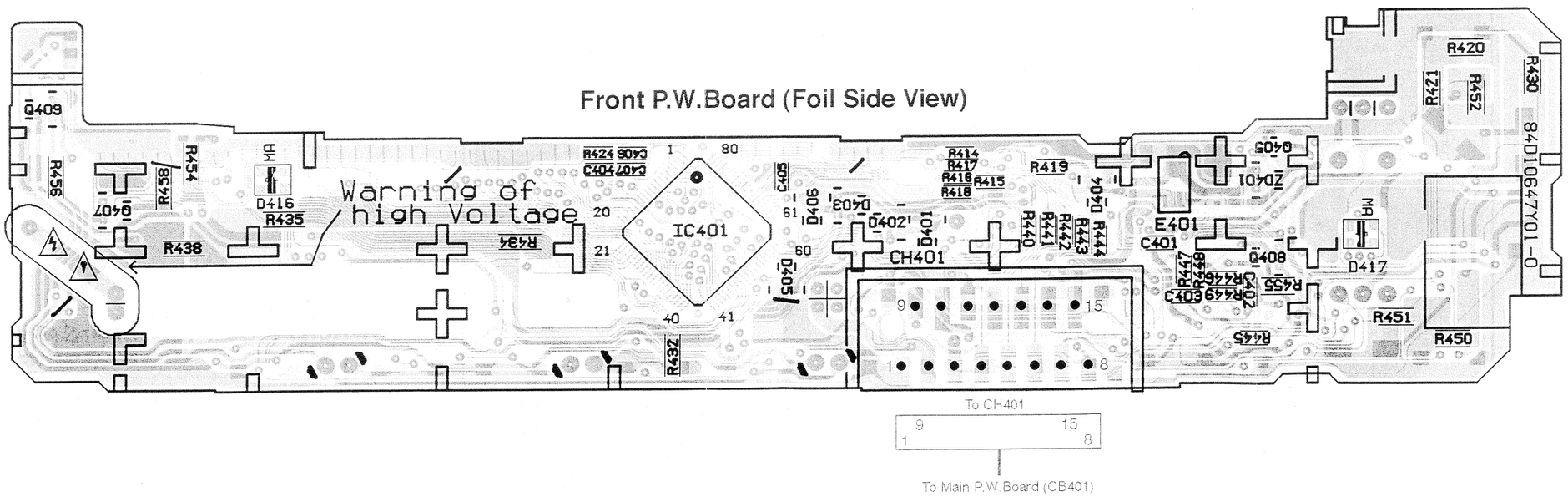
Orange Color Pattern : Component Side Pattern
Blue Color Pattern : Foil Side Pattern

Parts Layout on P.W. Boards and Wiring Diagram (3/4)

Front P.W.Board (Component Side View)



Front P.W.Board (Foil Side View)



To CH401

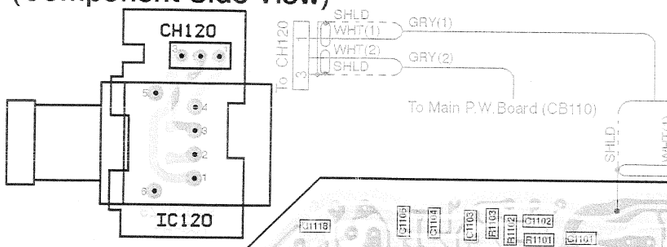
9 15
1 8

To Main P.W.Board (CB401)

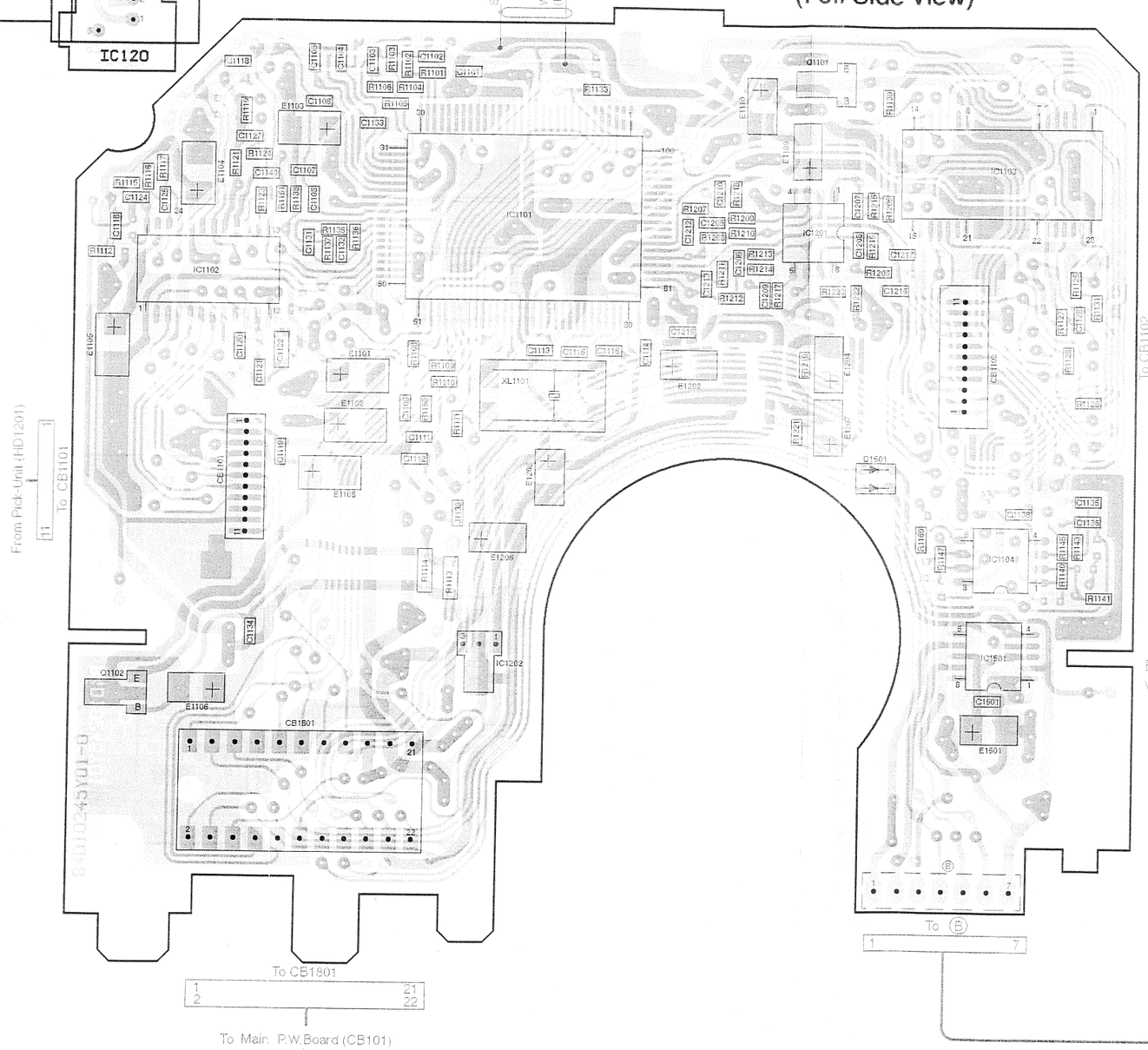
Orange Color Pattern : Component Side Pattern
Blue Color Pattern : Foil Side Pattern

Parts Layout on P.W. Boards and Wiring Diagram (4/4)

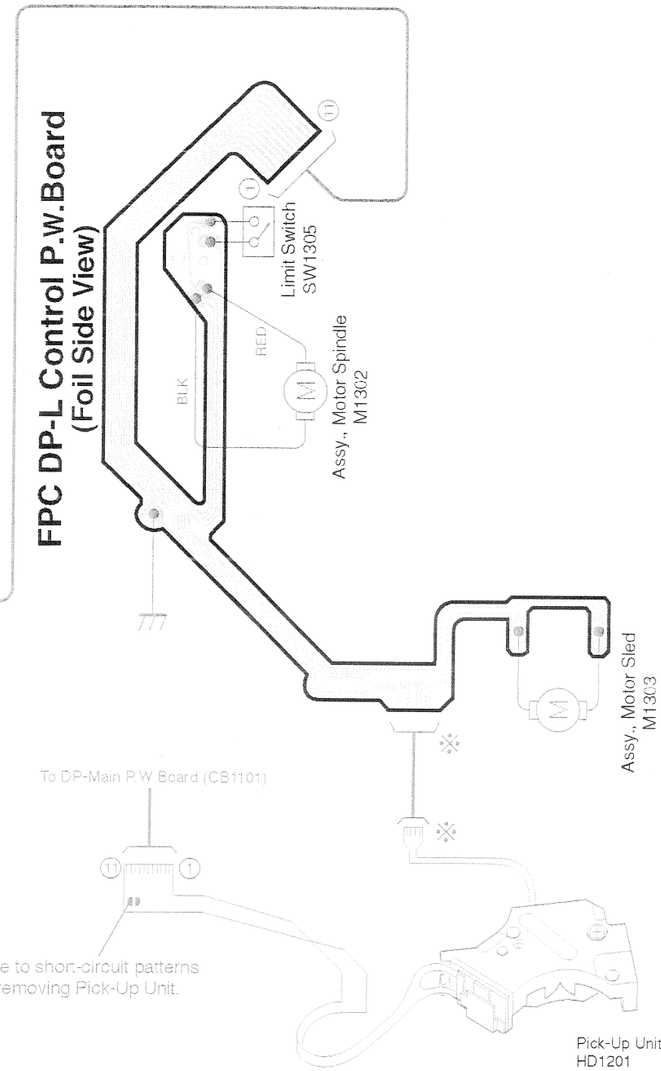
D-OUT P.W.Board (◯)
(Component Side View)



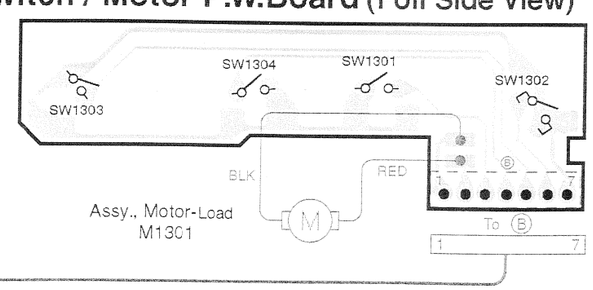
DP-Main P.W.Board
(Foil Side View)



FPC DP-L Control P.W.Board
(Foil Side View)

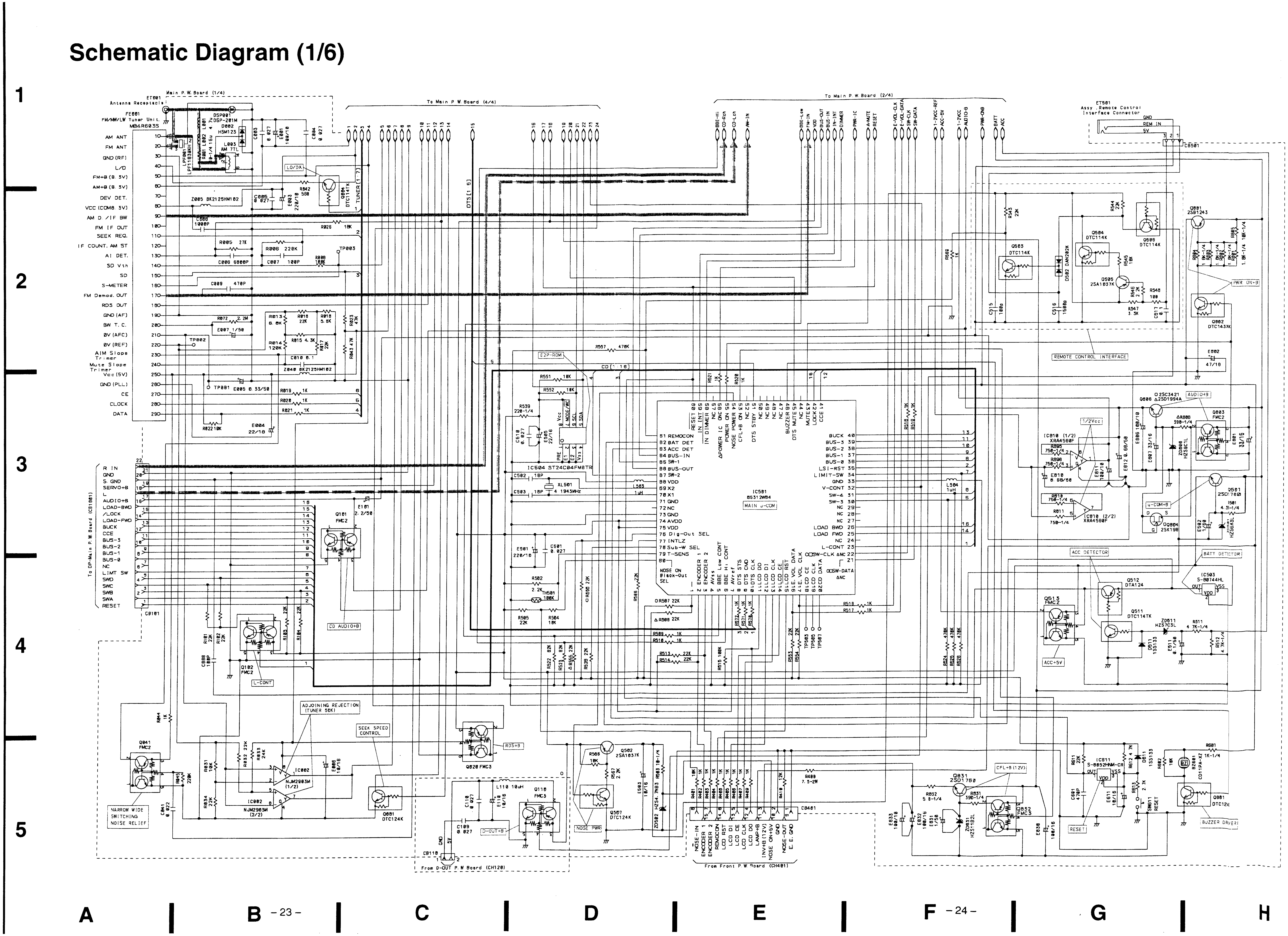


Switch / Motor P.W.Board (Foil Side View)

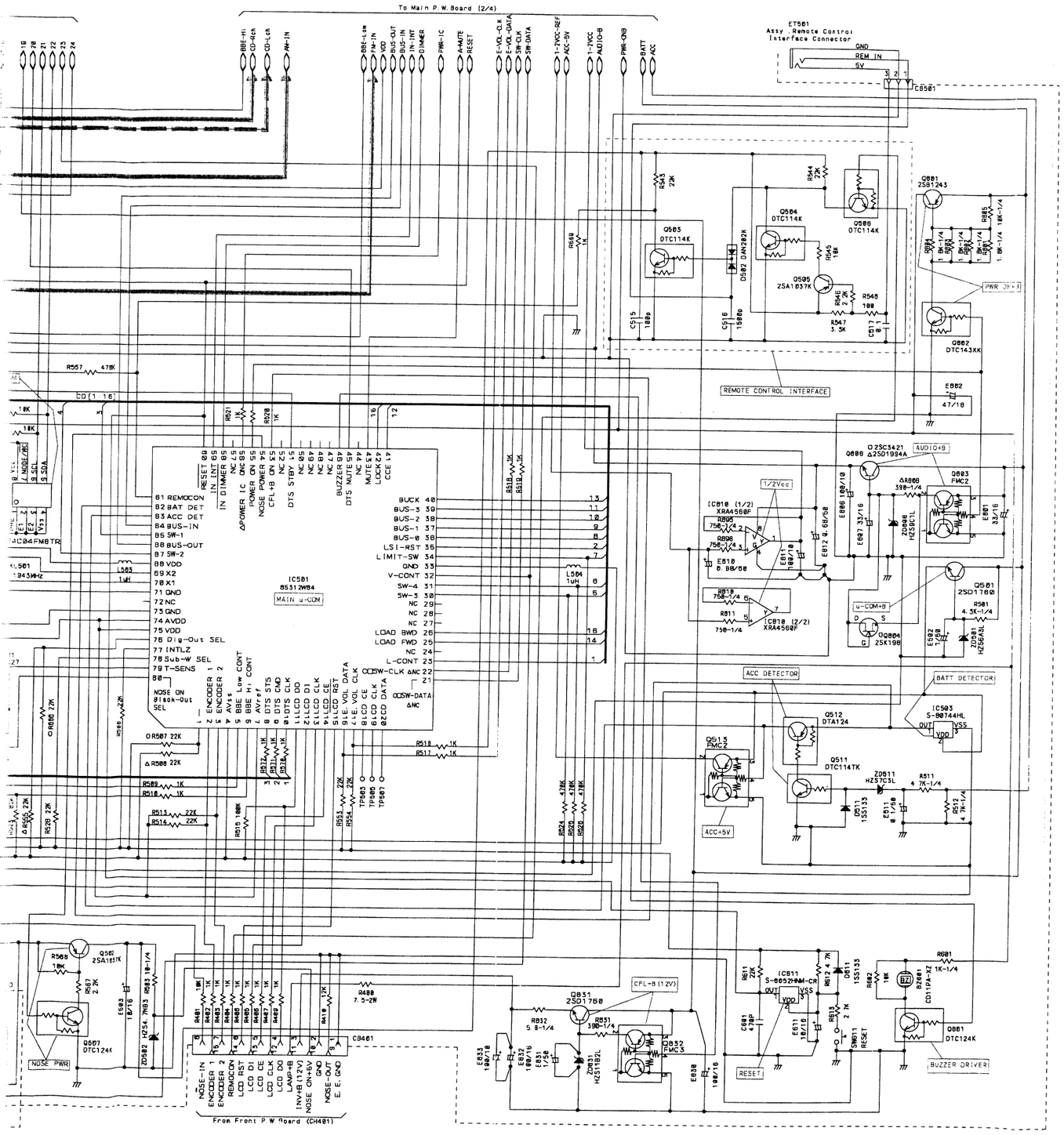


Orange Color Pattern : Component Side Pattern
Blue Color Pattern : Foil Side Pattern

Schematic Diagram (1/6)



1
2
3
4
5
Main P.W. Board (1/4)
ET001 Antenna Receptacle
FE001 FM/MW/LW Tuner Unit, MB4R603S
AM ANT
FM ANT
GND (RF)
L/D
FM+B (8.5V)
AM+B (8.5V)
DEV DET.
VCC (COM8.3V)
AM D./IF BW
FM IF OUT
SEEK REQ.
IF COUNT, AM ST
AI DET.
SD Vth
SD
S-METER
FM Demod. OUT
RDS OUT
GND (AF)
BW T.C.
0V (AFC)
0V (REF)
AM Slope Trimer
Mute Slope Trimer
Vcc (5V)
GND (PLL)
CE
CLOCK
DATA
DSP001 DSP-201M
D002 HSM123
L003 AM 7TL
LPF001 LPF11830KH
L001 L002
R001 0-1/4 15u 4.7u
C003 0.027
E001 100/10
C004 0.027
LO/DX
Q004 DTC114TK
TUNER [1:7]
R042 560
Z005 BK2125HM102
C005 0.027
E003 220/10
C008 1000P
R026 10K
R005 27K
C006 6800P
R006 220K
C007 100P
R008 100K
TP003
C009 470P
R072 2.2M
E007 1/50
R013 6.8K
R016 22K
R018 5.6K
R023 47K
R014 120K
R015 4.3K
R017 22K
R043 47K
C010 0.1
Z040 BK2125HM102
TP002
TP001
E005 0.33/50
R019 1K
R020 1K
R021 1K
R022 10K
E004 22/10
To Main P.W. Board (4/4)
DTS [1:5]
CD [1:16]
To Main P.W. Board (2/4)
BBE-Hi
CD-Rch
CD-Lch
AM-IN
BBE-Low
FM-IN
VDD
BUS-OUT
BUS-IN
IN-INT
DIMMER
PWR-IC
A-MUTE
RESET
E-VOL-CLK
E-VOL-DATA
SW-CLK
SW-DATA
1-2VCC-REF
ACC-5V
1-2VCC
AUDIO-B
PWR-ONB
BATT
ACC
ET501 Assy, Remote Control Interface Connector
GND
REM IN
5V
CB501
R543 22K
R544 22K
Q503 DTC114K
D502 DAN202K
Q504 DTC114K
R545 10K
Q506 DTC114K
Q505 2SA1037K
R546 2.2K
R548 100
R547 3.3K
C515 100p
C516 1500p
C517 0.1
R660 1K
REMOTE CONTROL INTERFACE
Q801 2SB1243
R805 10K-1/4
R804 1.8K-1/4
R803 1.8K-1/4
R802 1.8K-1/4
R801 1.8K-1/4
PWR ON+B
Q802 DTC143XK
E802 47/10
R557 470K
E2P-ROM
R551 10K
R552 10K
R539 220-1/4
C610 0.027
E505 22/16
IC604 ST24C04FM8TR
Vcc
MODE/WC
SCL
SDA
PRE
E1
E2
Vss
C502 18P
C503 18P
XL501 4.1943MHz
L503 1uH
R521 1K
R520 1K
IC501 85312W84
MAIN u-COM
61 REMOCON
62 BAT DET
63 ACC DET
64 BUS-IN
65 SW-1
66 BUS-OUT
67 SW-2
68 VDD
69 X2
70 X1
71 GND
72 NC
73 GND
74 AVDD
75 VDD
76 Dig-Out SEL
77 INTLZ
78 Sub-W SEL
79 T-SENS
80 NOSE ON Black-Out SEL
60 RESET
59 IN INT
58 IN DIMMER
57 NC
56 ΔPOWER IC ○NC
55 POWER ON
54 NOSE POWER
53 CFL+B ON
52 NC
51 DTS STBY
50 NC
49 NC
48 NC
47 NC
46 BUZZER
45 DTS MUTE
44 NC
43 MUTE
42 LOCK
41 CCE
BUCK 40
BUS-3 39
BUS-2 38
BUS-1 37
BUS-0 36
LSI-RST 35
LIMIT-SW 34
GND 33
V-CONT 32
SW-4 31
SW-3 30
NC 29
NC 28
NC 27
LOAD BWD 26
LOAD FWD 25
NC 24
L-CONT 23
○□SW-CLK ΔNC 22
21
○□SW-DATA ΔNC
1 ENCODER 1
2 ENCODER 2
3 AVss
4 BBE Low CONT
5 BBE Hi CONT
6 AVref
7 DTS STS
8 DTS CMD
9 DTS CLK
10 LCD DO
11 LCD DI
12 LCD CLK
13 LCD CE
14 LCD RST
15 E.VOL DATA
16 E.VOL CLK
17 CD CE
18 CD CLK
19 CD DATA
20
R518 1K
R519 1K
L504 1uH
E501 220/10
C601 0.027
R502 2.2K
TH501 100K
R505 22K
R504 10K
○R560 22K
R506 22K
○R507 22K
ΔR508 22K
R572 1K
R571 1K
R570 1K
R509 1K
R510 1K
R513 22K
R514 22K
R515 100K
R522 82K
R523 82K
ΔR555 22K
R528 22K
R553 22K
R554 22K
TP503
TP505
TP507
R516 1K
R517 1K
R524 470K
R525 470K
R526 470K
Q806 ○2SC3421 Δ2SD1994A
AUDIO+B
ΔR808 390-1/4
Q803 FMC2
E806 100/10
E807 33/16
ZD808 HZS8C1L
E801 33/16
1/2Vcc
IC810 (1/2) XRA4560F
R895 750-1/4
R898 750-1/4
E810 0.68/50
E811 100/10
E812 0.68/50
R810 750-1/4
R811 750-1/4
IC810 (2/2) XRA4560F
Q501 2SD1760
R501 4.3K-1/4
u-COM+B
Q804 2SK198
E502 1/50
ZD501 HZS6A3L
ACC DETECTOR
BATT DETECTOR
IC503 S-80744HL
OUT
VSS
VDD
Q512 DTA124
Q513 FMC2
Q511 DTC114TK
ZD511 HZS7C3L
R511 4.7K-1/4
D511 1SS133
E511 0.1/50
R512 4.7K-1/4
ACC+5V
To DP-Main P.W. Board (CB1001)
R IN
GND
S. GND
SERVO+B
L
AUDIO+B
LOAD-BWD
/LOCK
LOAD-FWD
BUCK
CCE
BUS-3
BUS-2
BUS-1
BUS-0
NC
LIMT SW
SWD
SWC
SWB
SWA
RESET
CB101
Q101 FMC2
E101 2.2/50
CD AUDIO+B
R101 22K
R102 22K
R103 22K
R104 22K
C888 100P
Q102 FMC2
L-CONT
R044 1K
Q041 FMC2
R045 220K
C041 0.022
NARROW WIDE SWITCHING NOISE RELIEF
ADJOINING REJECTION (TUNER 50K)
R031 10K
R032 22K
R033 24K
R034 22K
IC002 NJM2903M (1/2)
IC002 NJM2903M (2/2)
E008 10/16
SEEK SPEED CONTROL
Q081 DTC124K
Q020 FMC3
RDS+B
C110 0.027
L110 10uH
E110 10/16
Q110 FMC3
C109 0.027
D-OUT+B
CB110
GND
5V
From D-OUT P.W Board (CH120)
Q502 2SA1037K
R566 10K
R567 2.2K
Q507 DTC124K
NOSE PWR
E503 10/16
R503 10-1/4
ZD502 HZS4.7NB3
R401 10K
R402 1K
R403 1K
R404 1K
R405 1K
R406 1K
R407 1K
R408 1K
R409 1K
R410 12K
R400 7.5-2W
CB401
NOSE-IN
ENCODER 1
ENCODER 2
REMOCON
LCD RST
LCD DI
LCD CE
LCD CLK
LCD DO
LAMP+B
INV+B (12V)
NOSE ON+5V
GND
NOSE-OUT
E.E. GND
From Front P.W. Board (CH401)
Q831 2SD1760
CFL+B (12V)
R832 5.6-1/4
R831 390-1/4
Q832 FMC3
E833 100/10
E832 100/16
E831 1/50
ZD831 HZS11B2L
E830 100/16
R611 22K
IC611 S-8052HNM-CR
R612 4.7K
D611 1SS133
C601 470P
E611 10/16
R613 2.7K
SW611 RESET
RESET
R601 1K-1/4
R602 10K
BZ601 CD11PA-X2
Q601 DTC124K
BUZZER DRIVER
A
B
C
D
E
F
G
H



IC002

1	8.32V	5	6.54V
2	3.38V	6	4.73V
3	4.72V	7	8.32V
4	0V	8	8.33V

IC503

1, 2	5V
3	0V

IC504

1–4	0V
5–8	5V

IC611

1	5.2V	
2	5V / 0V	POWER ON / OFF
3	0V	

IC810

1–3	4.5V
4	0V
5–7	4.5V
8	9V

IC501

1	○ 5V		52	NC	
	△ 0V		53–54	5V	
2	5V / 0V	Voltage Change for Encoder Volume	56	○ NC	
3, 4	0V			△ 5V	
5	3.5–0V / 0V	BBE(+1–+6) / OFF	57	NC	
6	1.8–3.5V / 0V		58	5V / 0V	DIM ON / OFF
7–10	5V		59	4.98V / 0V	IN-INT ON / OFF
11–17	PS		60	5.06V	
18–20	0V		61	4.69V	
21, 22	PS / 5V	SUB-W ON / OFF	62	4.79V	
23	5V / 0V	POWER ON / CD PLAY	63	4.77V	
24	NC		64	PS / 0V	CHG / POWER ON
25, 26	0V		65	0V / 4.83V	CD PLAY / DISC LOAD, EJECT
27–29	NC		66	PS / 0V	CHG / POWER ON
30	0V / 4.83V	DISC IN / OUT	67	0V / 4.83V	CD PLAY / DISC LOAD, EJECT
31	0V / 4.83V	CD PLAY / DISC LOAD, EJECT	68	5.07V	
32	0V / 5.04V	POWER ON / CD PLAY	69, 70	OSC	
33	0V		71	0V	
34	0V / 4.66V	POWER ON / CD PLAY	72	NC	
35	0V / 5.06V		73	0V	
36–41	0V / PS		74, 75	5.08V	
42	0V / 5.1V	POWER ON / CD PAUSE	76	○ 5V	
43	5V / 0V	MUTE ON / OFF		△ 0V	
44	NC		77	5.09V	
45	5V		78	5.07V	
46	PS / 0V	BUZZER ON / OFF	79	4.91V	
47–50	NC		80	2.56V	
51	5V				

	E	C	B	MODE
Q004	4.2V / 0V	8.2V / 8.2V	4.8V / 0V	LOCAL / DX SEEK
Q081	0V / 0V	0V / 0V	5V / 0V	SEEK / POWER ON
Q501	5V	14V	5.5V	
Q502	5.3V	5V	5V	
Q503	0V	4.8V	0V	
Q504	0V	0V	0V	
Q505	5.05V	0V	5.04V	
Q506	0V	0V	1.89V	

	E	C	B	MODE
Q507	0V	0V	5V	
Q511	0V	0V	4.7V	
Q512	4.7V	4.7V	0V	
Q601	0V / 0V	14V / PS	0V / 0V	POWER ON / BUZZER
Q801	14V	14V	13.1V	
Q802	0V	0V	5V	
Q806	1.5V	14.5V	9.8V	
Q831	10.5V	14V	11V	

	1	2	3	4	5	MODE
Q020	NC	4.97V / 0V	5.09V / 5.09V	8.27V / 0.97V	0V / 0V	FM / MW, LW
Q041	NC	3.5V / 1.5V	5V	0V	0V	MW, LW / OTHERS
Q101	NC	1.4V / 1.2V	1.6V / 0V	14.2V / 0V	0V / 0V	CD / EJECT
Q102	NC	0V / 5V	5V / 0V	0V / 5V	5V / 5V	CD / EJECT
○Q110	NC	4.94V / 4.94V	5.07V / 5.07V	5.04V / 0V	0V / 0V	CD PLAY / POWER ON
Q513	NC	5V	5V	5V	0V	
Q803	NC	13.8V	14.1V	4.3V	0V	
Q832	NC	14V	14.2V	5.2V	0V	

	G	D	S
○Q804	9.24V	9.24V	14.28V

[Measuring Conditions]

- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Voltmeter
- Measuring Point Reference : Between Ground
- Measuring Conditions : Power ON, FM 98.1MHz, No Modulation

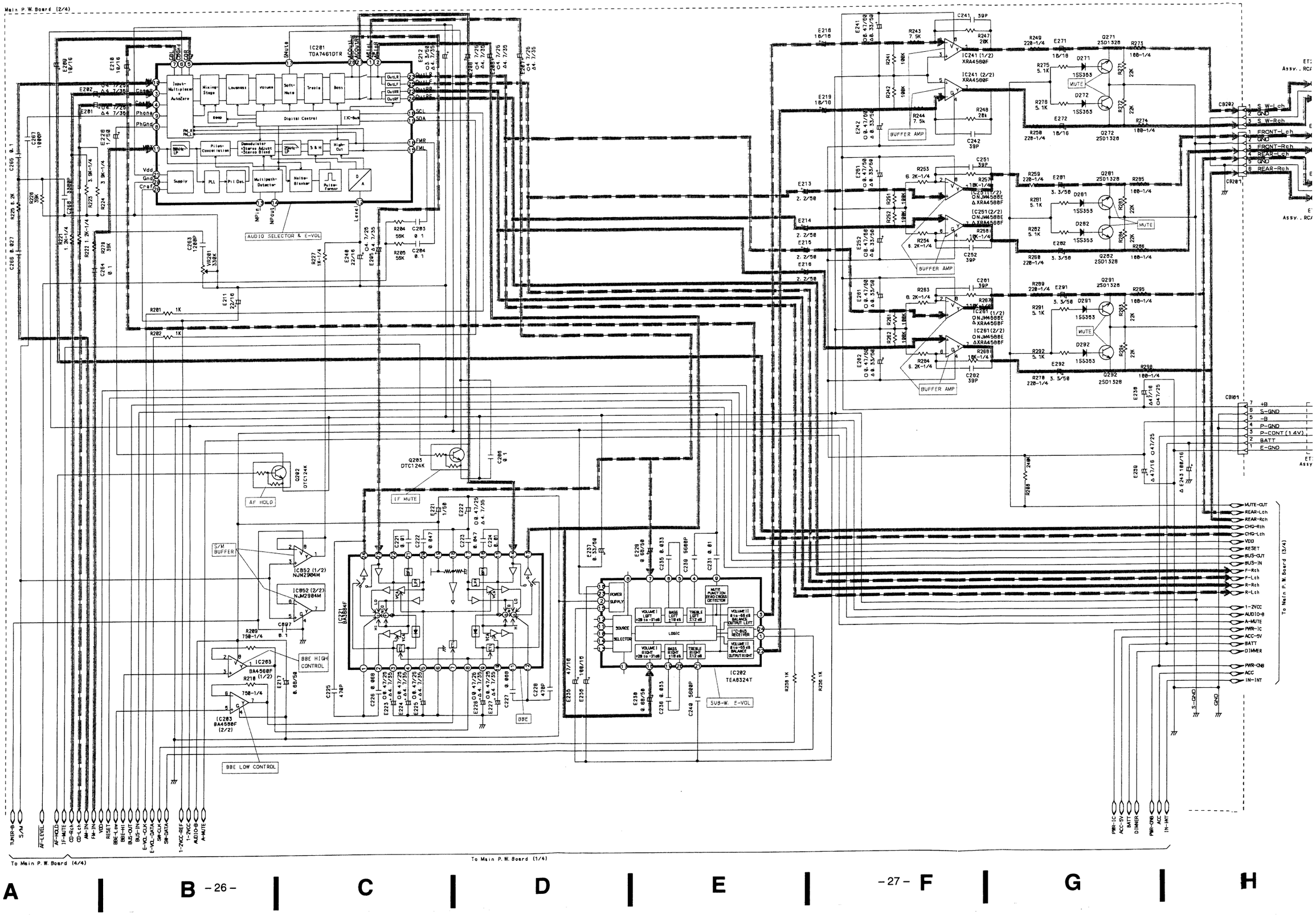
NOTE : ○ : For CDA-7944R Model Only,
△ : For CDA-7842R Model Only,
Others : Common.

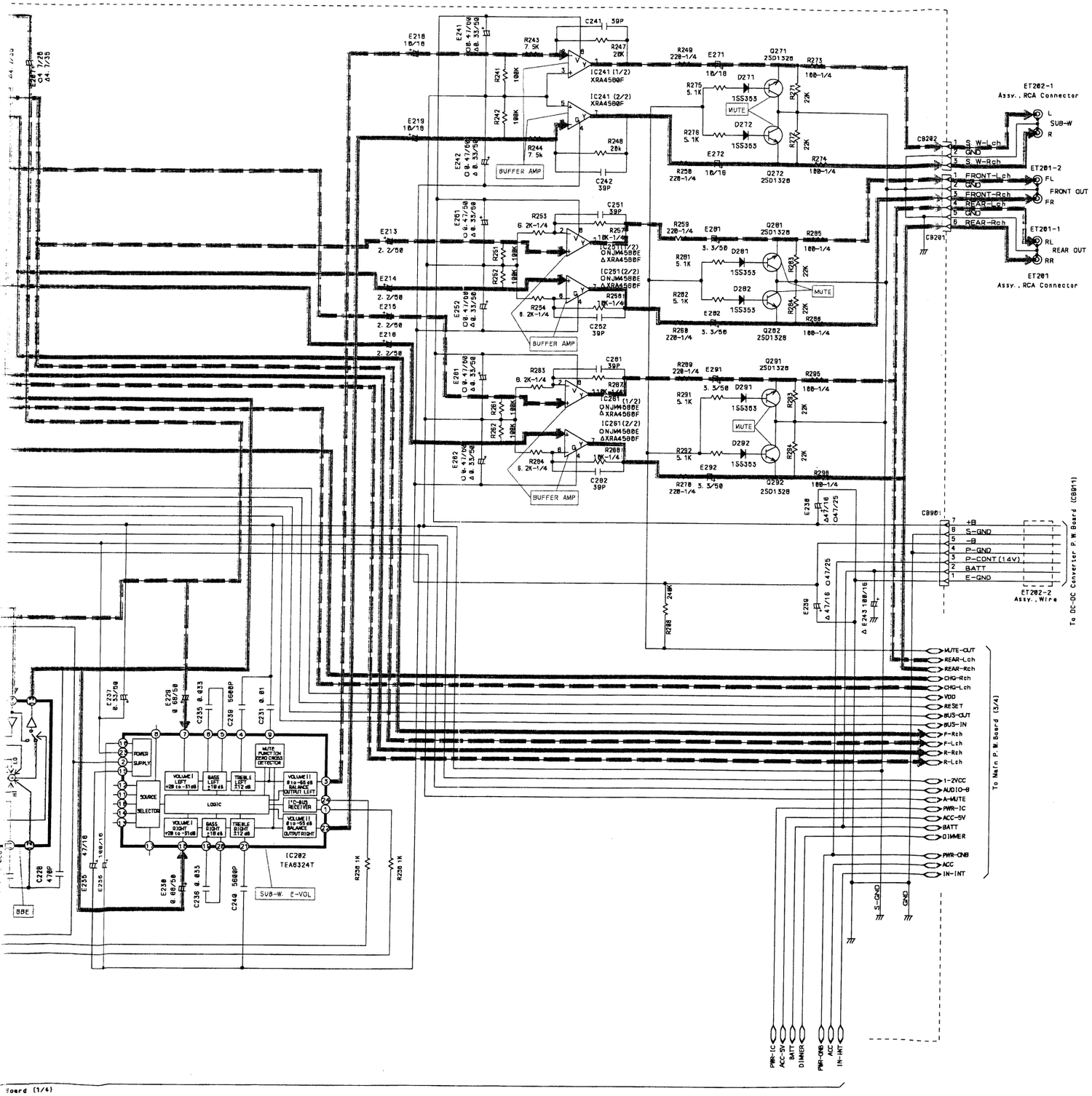
NOTE:

1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. P = $\frac{1}{1{,}000{,}000}$

CDA-7944R/
CDA-7842R

Schematic Diagram (2/6)





IC201

1–7	4.4V	
8	4.5V	
9	0V	
10	4.4V	MW, LW
11	4.4V	
12	4.5V	
13, 14	NC	
15, 16	4.5V	
17	5.1V	MUTE ON / OFF
18, 19	PS	
20	0V	
21	8.93V	
22–25	4V	
26–28	4.5V	

IC202

1	PS	15	9V
2	0V	16	4.5V
3–7	4.5V	17	NC
8	NC	18–22	4.5V
9	4.5V	23	9V
10–14	NC	24	5.2V

IC203

1	1.5–3.5V / 8.2V	BBE ON (+1–+6) / OFF
2	1.5–3.5V / 0V	
3	1.5–3.2V / 0V	
4	0V	BBE ON (+1–+6) / OFF
5	0–3.8V / 0V	
6, 7	1.8–8.2V / 8.2V	
8	9V	

IC221

1, 2	4.5V	
3	4V / 6.5V	BBE ON / OFF
4	3.5V	
5	4V / 6.5V	BBE ON / OFF
6	0V	
7	1.8–8.2V/ 8.2V	BBE ON (+1–+6) / OFF
8	1.5–3.5V / 8.2V	BBE ON (+1–+6) / OFF
9	4V	
10	4.5V / 6.5V	BBE ON / OFF
11–14	4.5V	
15	9V	
16–18	4.5V	
19	9V	
20–24	4.5V	

IC241

1–3	0V
4	-8.83V
5–7	0V
8	9.13V

IC261

1–3	0V
4	-8.84V
5–7	0V
8	9.14V

IC251

1–3	0V
4	-8.83V
5–7	0V
8	9.12V

IC852

1–3	4.5V
4	0V
5–7	4.5V
8	9V

	E	C	B	MODE
Q202	0V / 0V	PS / 0V	5V / 0V	SEEK / POWER ON
Q203	0V / 0V	0V / 0V	0V / 2.7V	MUTE ON / OFF
Q271	0V / 0V	0V / 0V	0.7V / 0V	MUTE ON / OFF
Q272	0V / 0V	0V / 0V	0.7V / 0V	MUTE ON / OFF
Q281	0V / 0V	0V / 0V	0.7V / 0V	MUTE ON / OFF
Q282	0V / 0V	0V / 0V	0.7V / 0V	MUTE ON / OFF
Q291	0V / 0V	0V / 0V	0.7V / 0V	MUTE ON / OFF
Q292	0V / 0V	0V / 0V	0.7V / 0V	MUTE ON / OFF

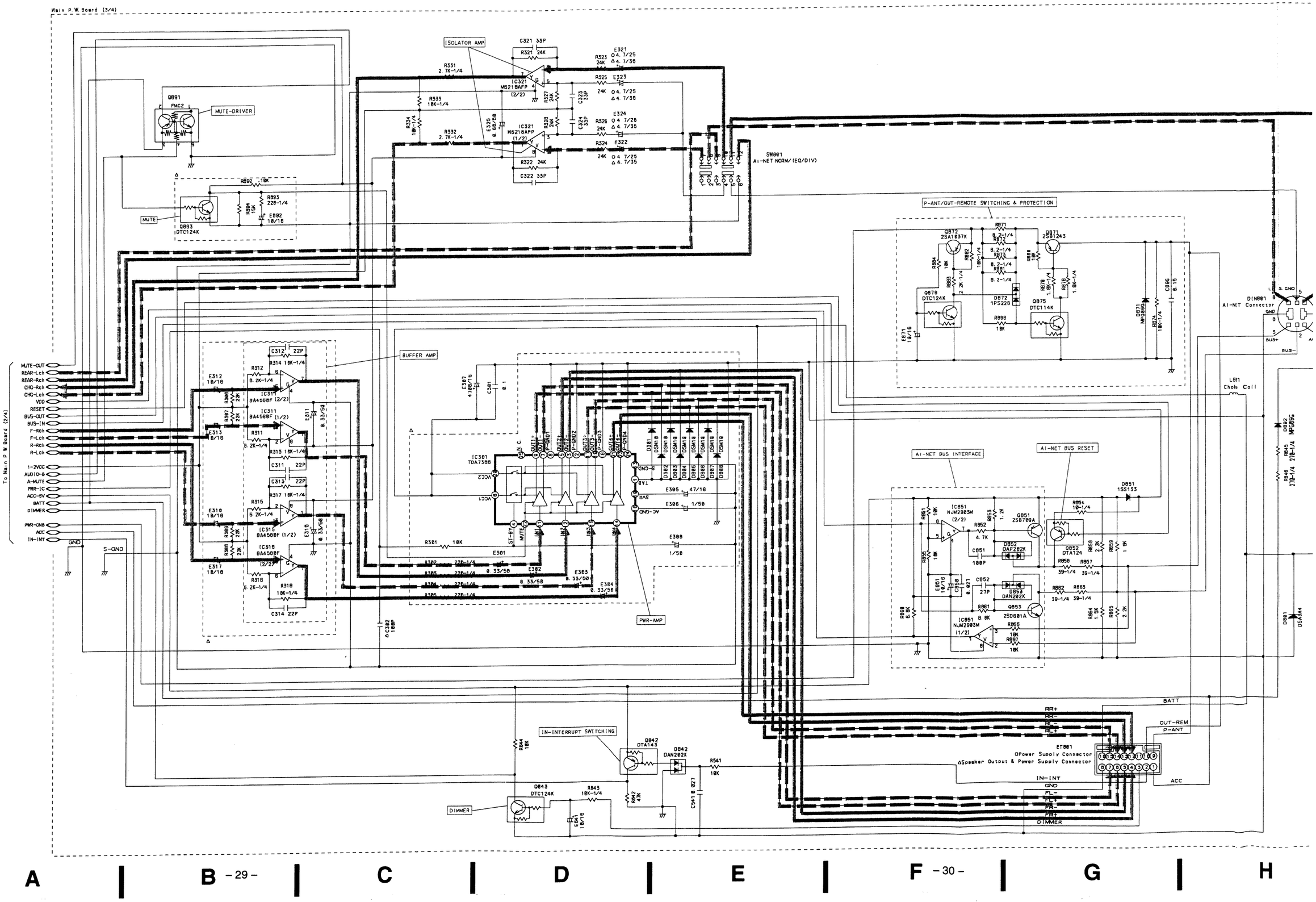
[Measuring Conditions]

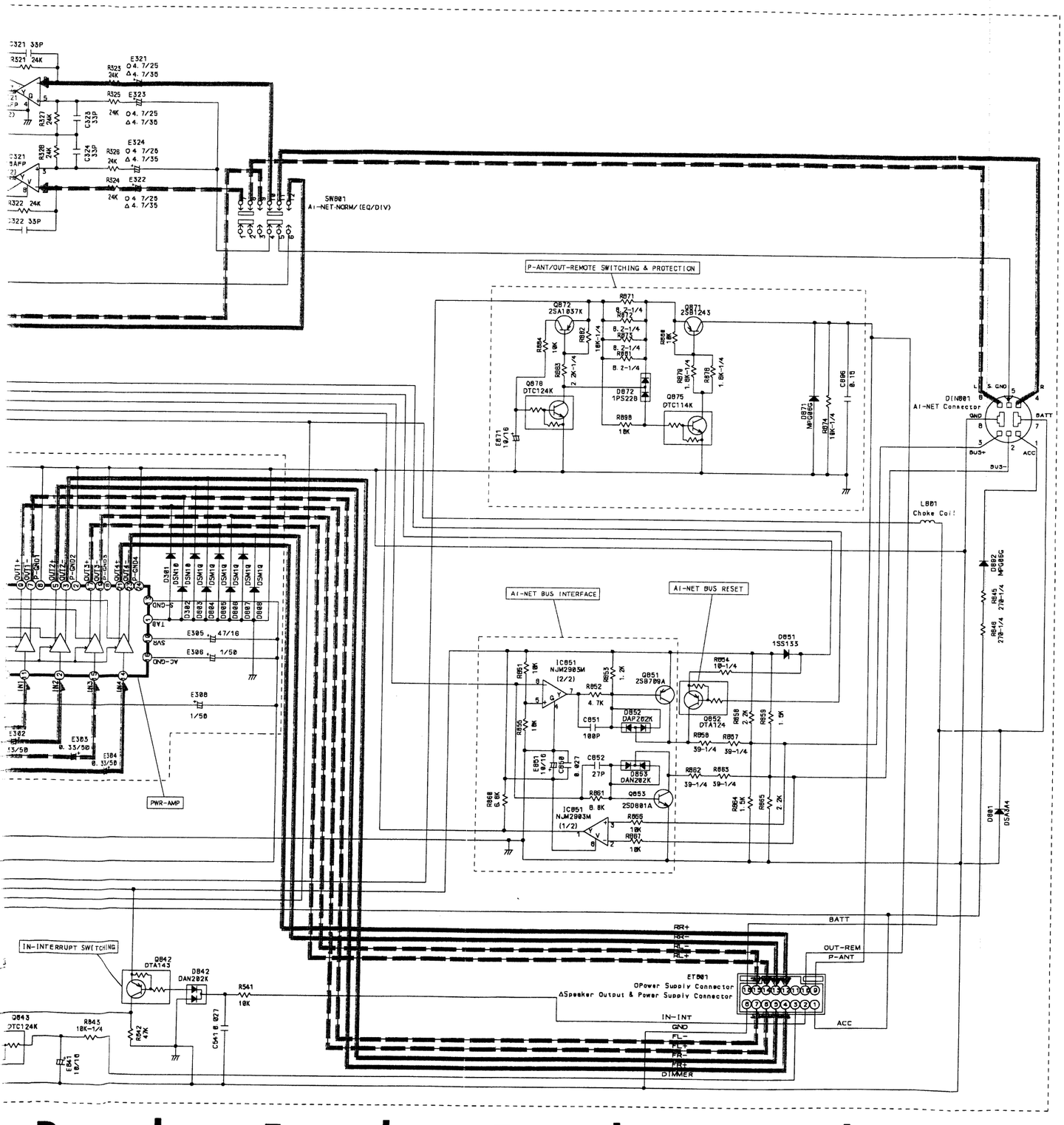
- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Voltmeter
- Measuring Point Reference : Between Ground
- Measuring Conditions : Power ON, FM 98.1MHz, No Modulation

NOTE : ○ : For CDA-7944R Model Only,
△ : For CDA-7842R Model Only,
Others : Common.

NOTE:
1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. P = $\frac{1}{1{,}000{,}000}$

Schematic Diagram (3/6)





△IC301

1, 2	0V		14	7.13V	
3	7.26V		15	7.14V	
4	5V / 0V	POWER ON / OFF	16	7.21V	
5	7.24V		17	7.28V	
6	14.2V		18	0V	
7	7.22V		19	7.26V	
8	0V		20	14.3V	
9	7.26V		21	7.28V	
10	7.23V		22	0V / 0.8V	MUTE ON / OFF
11	7.14V		23	7.3V	
12	7.13V		24	0V	
13	0V		25	NC	

△IC311, △IC315, IC321

1~3	4.5V
4	0V
5~7	4.5V
8	9V

IC851

1~3	PS / 0V	CHG / POWER ON
4	0V	
5	2.5V / 0V	CHG / POWER ON
6, 7	PS / 0V	
8	5V/ 5V	

	E	C	B	MODE
Q842	5V / 5V	0V / 5V	5V / 3.2V	POWER ON / INT
Q843	0V / 0V	5V / 0V	0V / 0.3V	POWER ON / DIMMER
Q851	5V / 5V	PS / 2V	PS / 5V	CHG / POWER ON
Q852	5V / 5V	PS / 2V	5V / 5V	CHG / POWER ON
Q853	0V / 0V	PS / 3V	PS / 0V	CHG / POWER ON
Q871	14V	14V	13V	
Q872	14V	14V	3.5V	
Q875	0V	0V	3.7V	
Q876	0V	4.2V	0V	
△Q893	0V / 0V	0V / 0.8V	5V / 0V	MUTE ON / OFF

	1	2	3	4	5	MODE
Q891	NC	14V / -8.5V	14V / 14.1V	5V / 0V	0V / 0V	MUTE ON / OFF

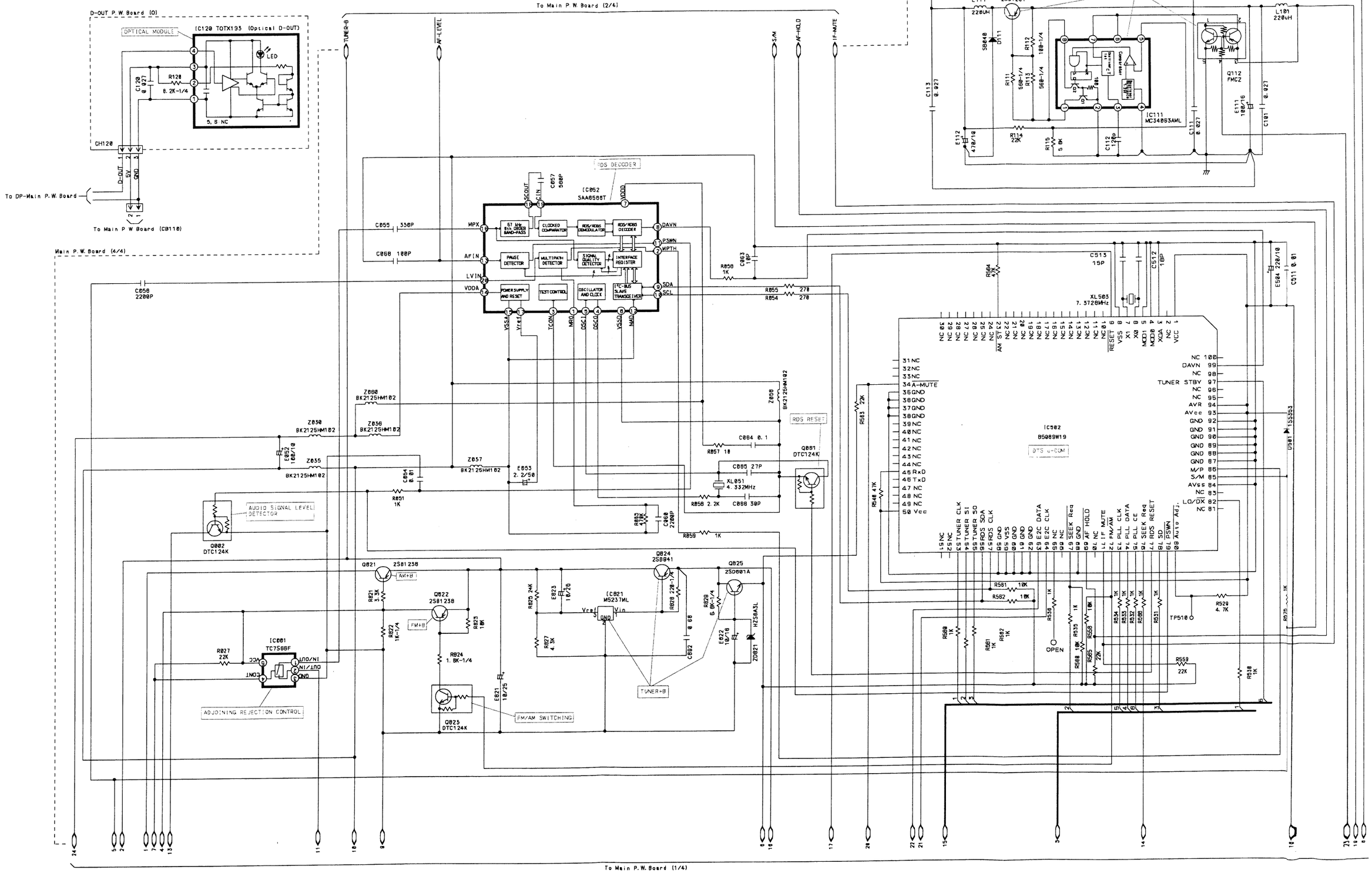
[Measuring Conditions]

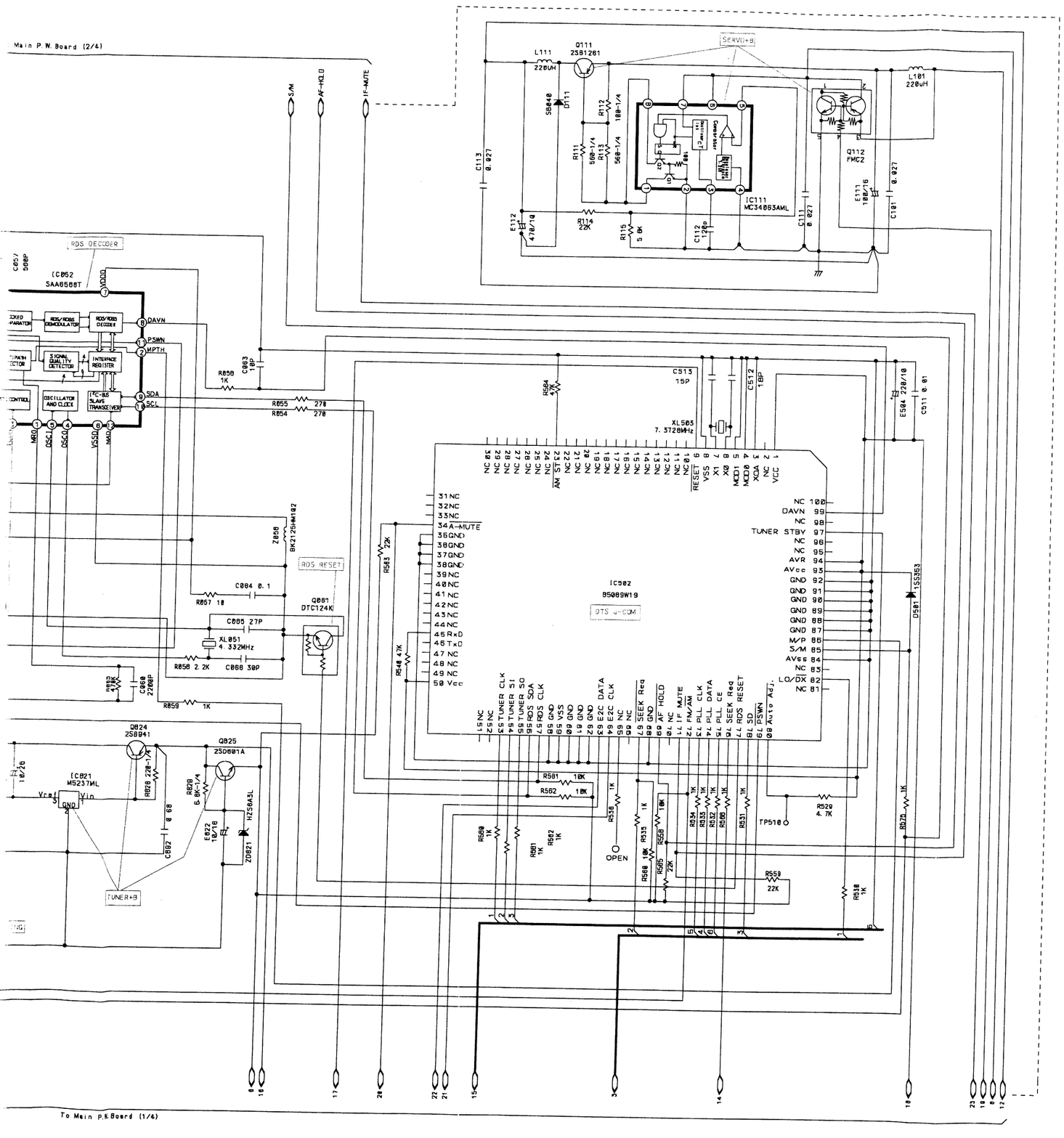
- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Voltmeter
- Measuring Point Reference : Between Ground
- Measuring Conditions : Power ON, FM 98.1MHz, No Modulation

NOTE : ○ : For CDA-7944R Model Only,
△ : For CDA-7842R Model Only,
Others : Common.

NOTE:
1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. P = $\frac{1}{1{,}000{,}000}$

Schematic Diagram (4/6)





IC001

1, 2	5V
3	0V
4, 5	8.2V

IC052

1-3	0V	11, 12	0V
4, 5	PS	13	2.5V
6, 7	0V	14	5V
8	PS	15	0V
9	5V	16-20	2.5V
10	PS		

IC111

1	14.5V / PS	POWER ON / CD MODE
2	0V	
3	0V / PS	POWER ON / CD MODE
4	0V	
5	0V / 1.5V	POWER ON / CD MODE
6, 7	0V / 14.5V	
8	14.5V / PS	

○ IC120

1	0V	
2	2.14V / 0V	CD PLAY / POWER ON
3	4.91V / 0V	
4	PS / 0V	at DIGITAL-OUT / POWER ON
5, 6	NC	

IC502

1	5.08V	51, 52	NC		80	5V	
2	NC	53-55	PS		81	NC	
3-5	0V	56, 57	PS		82	5V / 0V	LO SEEK / POWER ON
6, 7	OSC	58-62	0V		83	NC	
8	0V	63, 64	5V		84	0V	
9	5.04V	65, 66	NC		85	4.56V	
10-22	NC	67	0V / PS	POWER ON / SEEK	86	0V	
23	0V	68	0V		87-92	0V	
24-33	NC	69	2.8V		93, 94	5V	
34	5V	70	NC		95, 96	NC	
35-38	0V	71	0V		97	5V	
39-44	NC	72	3.5V / 0V	FM / MW, LW	98	NC	
45, 46	5V	73, 74	5V / PS	POWER ON / SEEK	99	PS	
47-49	NC	75, 76	0V / PS		100	NC	
50	5V	77-79	0V				

IC821

1	13.5V
2	0V
3	1.3V

	E	C	B	MODE
Q002	0V	0V	0V	
Q061	0V	PS	0V	
Q111	14V	PS	13.5V	CD
Q821	8.5V / 7.4V	0V / 8V	8.5V / 8.1V	FM / MW, LW
Q822	8.3V / 8.3V	8.3V / 1.2V	7.5V / 8V	FM / MW, LW
Q823	0V / 0V	0V / 8.5V	3.5V / 0V	FM / MW, LW
Q824	14.2V	8.5V	13.3V	
Q825	5V	14V	5.7V	

	1	2	3	4	5	MODE
Q112	NC.	14V / 0V	14.1V / 14.1V	5.3V / 0V	0V / 0V	CD / EJECT

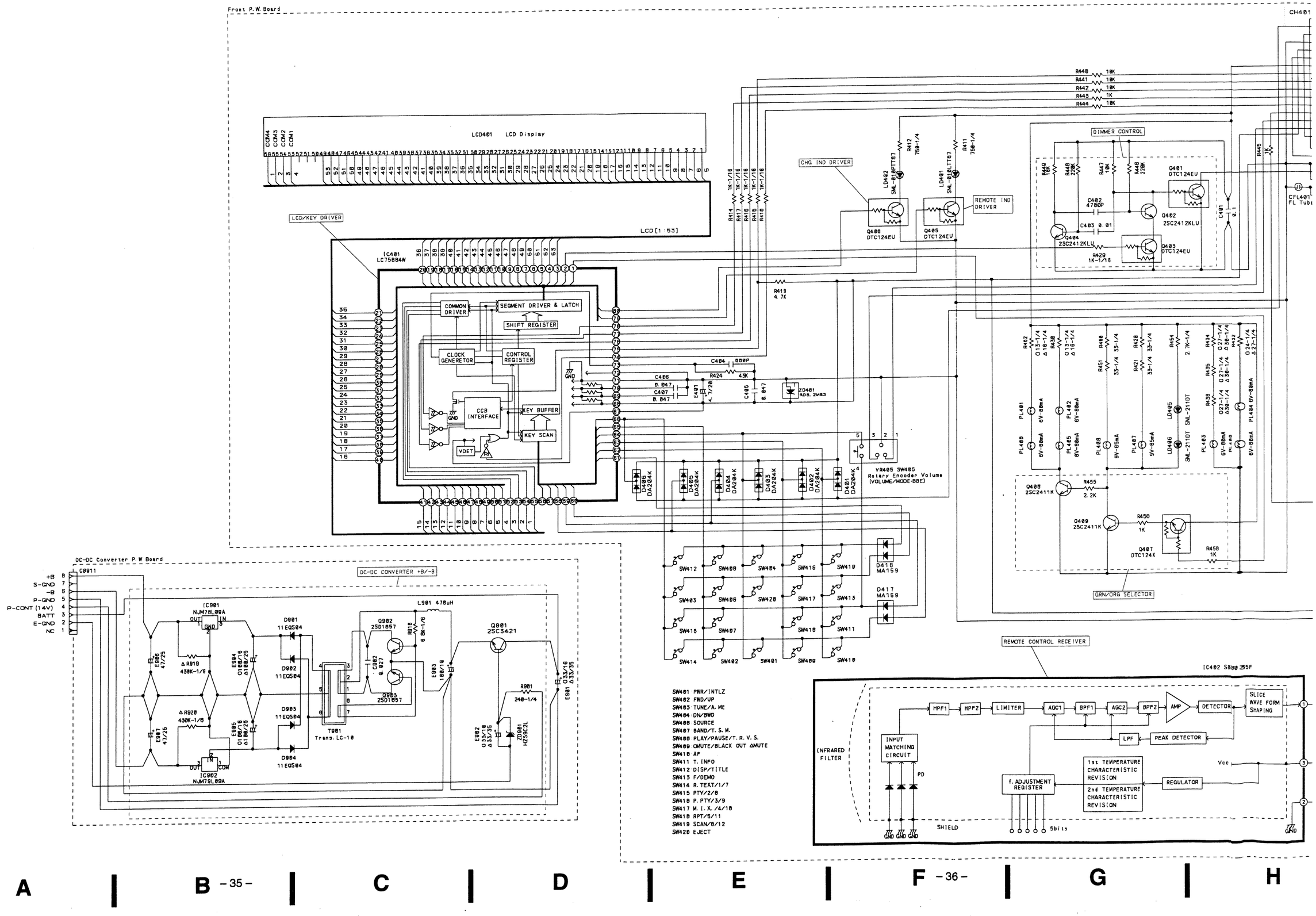
[Measuring Conditions]

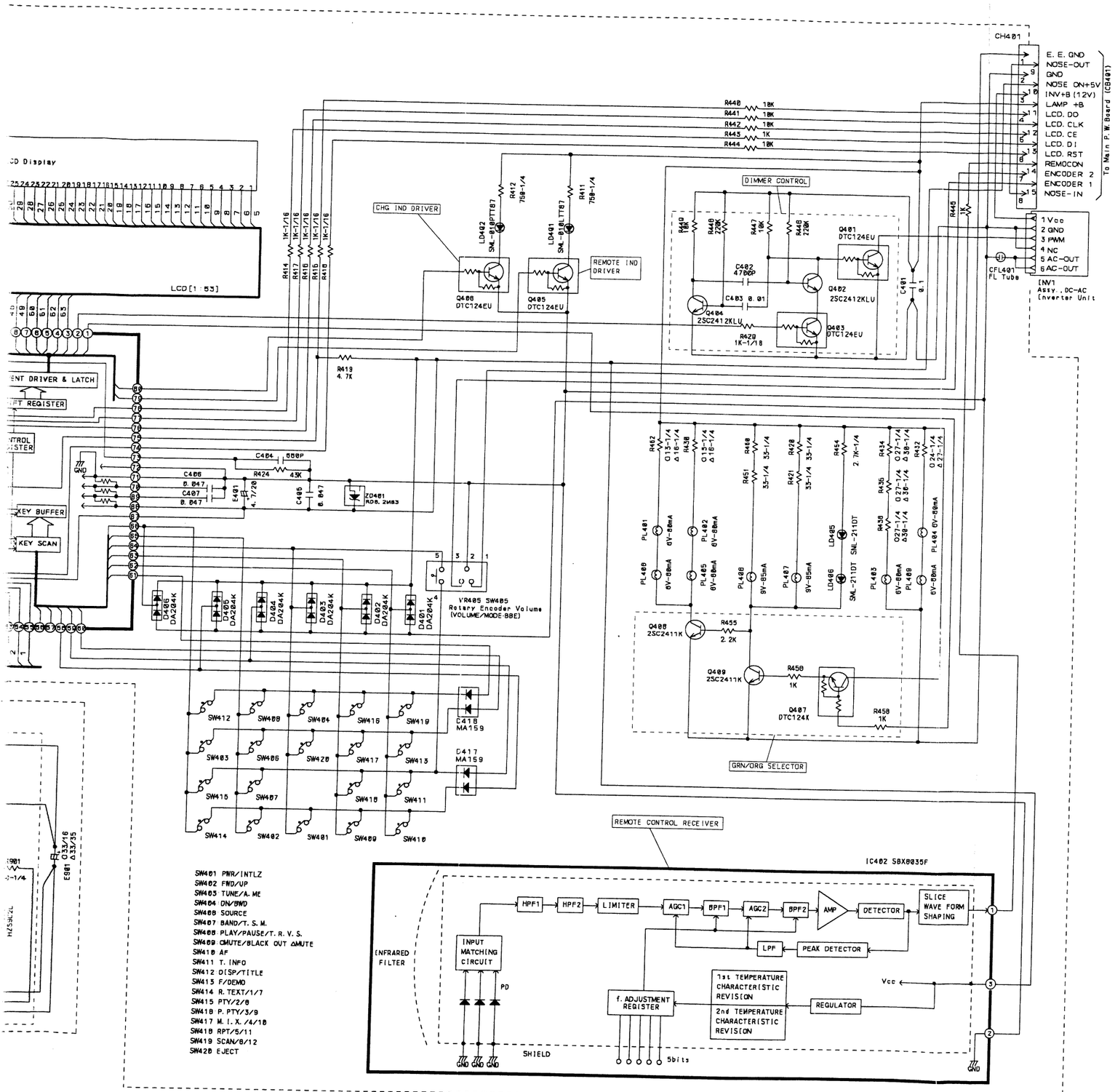
- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Voltmeter
- Measuring Point Reference : Between Ground
- Measuring Conditions : Power ON, FM 98.1MHz, No Modulation

NOTE : ○ : For CDA-7944R Model Only,
△ : For CDA-7842R Model Only,
Others : Common.

NOTE:
1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. P = $\frac{1}{1{,}000{,}000}$

Schematic Diagram (5/6)





IC401

1	0V / 5V	GRN / ORG	70	2V	
2	5V / 0V	DIM ON / OFF	71, 72	0V	
3-55	PS		73	PS	
56, 57	NC		74, 75	5V	
58-61	5V		76-78	PS	
62-66	0V		79	5V / 0V	REMO INDICATOR ON / OFF
67, 68	5V		80	5V / 0V	CHG INDICATOR ON / OFF
69	3.5V				

IC402

1	5V
2	0V
3	5V

IC901

1	9V
2	0V
3	13.5V

IC902

1	0V
2	-13.5V
3	-9V

	E	C	B	MODE
Q401	0V / 0V	PS / 0V	PS / 8.2V	DIMMER ON / OFF
Q402	0V / 8V	PS / 8V	PS / 8.2V	DIMMER ON / OFF
Q403	0V / 0V	0V / 8V	5V / 0V	DIMMER ON / OFF
Q404	0V / 0V	PS / 0V	PS / 0V	DIMMER ON / OFF
Q405	0V / 0V	0V / 10.3V	5V / 0V	REMO INDICATOR ON / OFF
Q406	0V / 0V	0V / 10.3V	5V / 0V	CHG INDICATOR ON / OFF
Q407	0V / 3.5V	0V / 12V	11.8V / 5V	GRN / ORG
Q408	0V / 0V	0V / 11.8V	1.2V / 0V	GRN / ORG
Q409	0V / 0V	11.8V / 0V	0V / 1.2V	GRN / ORG
Q901	9.5V	10V	14.5V	
Q902	0V	PS	PS	
Q903	0V	PS	PS	

[Measuring Conditions]

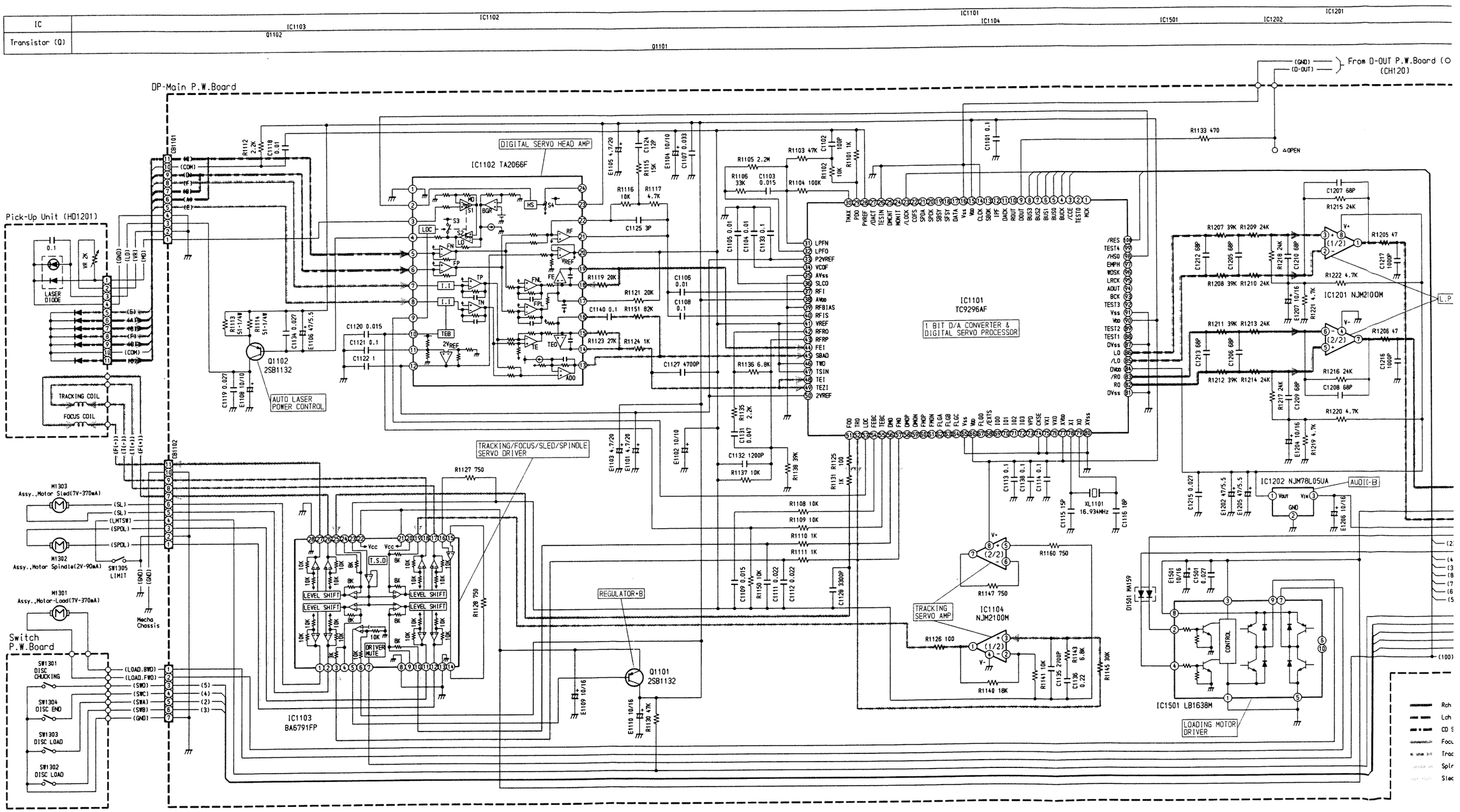
- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Voltmeter
- Measuring Point Reference : Between Ground
- Measuring Conditions : Power ON, FM 98.1MHz, No Modulation

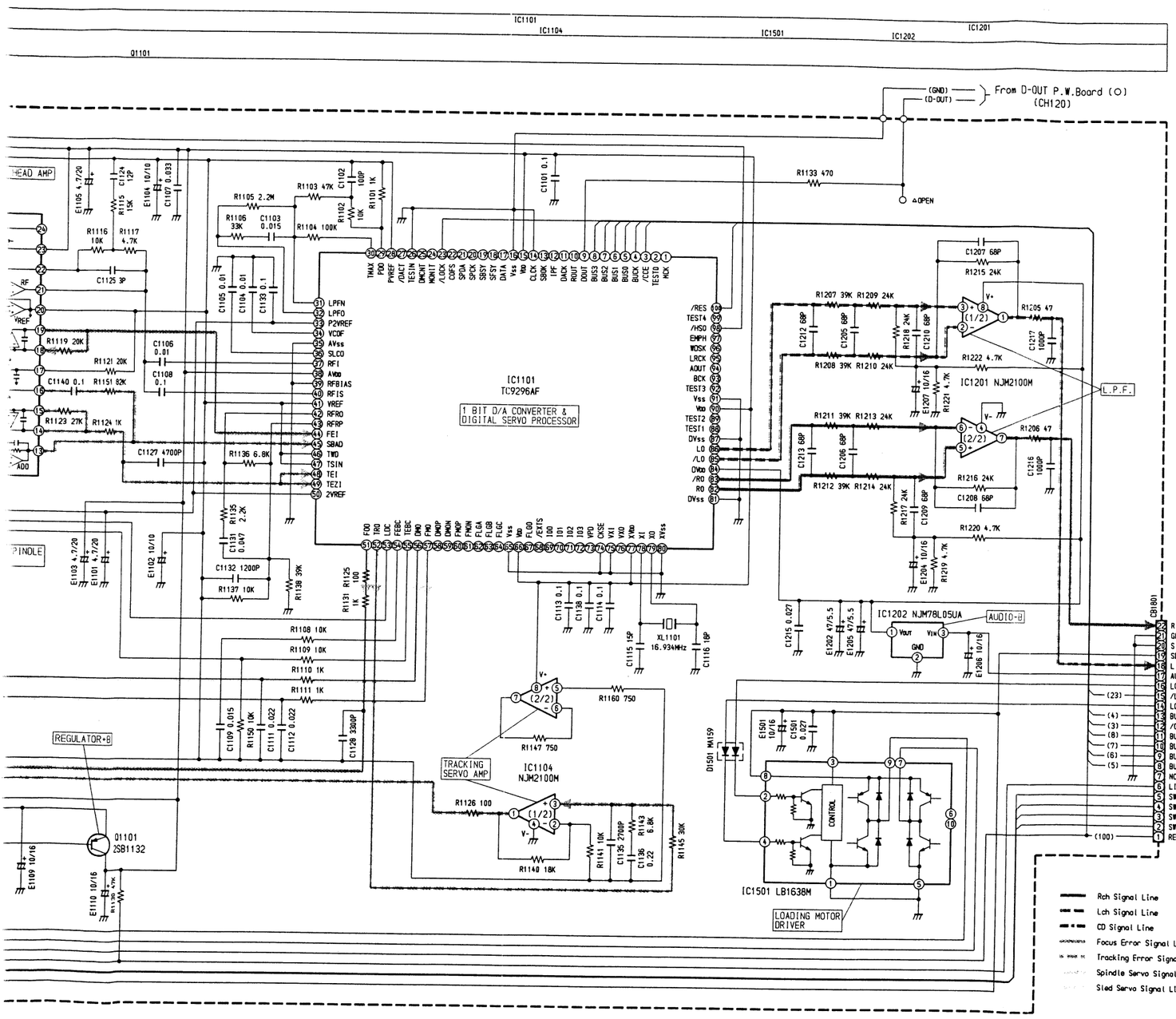
NOTE : ○ : For CDA-7944R Model Only,
△ : For CDA-7842R Model Only,
Others : Common.

NOTE:
1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. P = $\frac{1}{1{,}000{,}000}$

CDA-7944R/
CDA-7842R
CDA-7944R/
CDA-7842R

Schematic Diagram (6/6)





IC1101

1, 2	NC	33	4.3V	50	4.3V	82, 83	2.5V
3~9	PS	34	1.2V	51	2.1V	84	5V
10~13	NC	35	0V	52	2.2V	85, 86	2.5V
14	0V	36	2.2V	53	5V	87	0V
15	5V	37	0V	54~57	PS	88, 89	NC
16	0V	38	5V	58~64	NC	90	5V
17~22	NC	39	0V	65	0V	91	0V
23	0V	40	PS	66	5V	92~97	NC
24, 25	NC	41	2.2V	67~73	NC	98	5V
26	0V	42	3.6V	74, 75	0V	99	NC
27	NC	43	2.8V	76	NC	100	5V
28	2.1V	44	2.2V	77	5V		
29	PS	45	0V	78, 79	PS		
30~32	2.1V	46~49	2.2V	80, 81	0V		

IC1102

1	0V	13	2.7V
2	5V	14	2.2V
3	0.2V	15	2.2V
4	3.3V	16	2.2V
5	2.2V	17	2.4V
6	2.2V	18	2.4V
7	2V	19	2.3V
8	2V	20	2.2V
9	5V	21	PS
10	2.2V	22	2.2V
11	2.2V	23	5V
12	4.3V	24	NC

IC1103

1	3.3V	15	2.2V
2	3V	16	2.2V
3	2.2V	17	3.2V
4	NC	18	2.2V
5	5.5V	19	2.2V
6	5V	20	NC
7	6.3V	21	6.3V
8	0V	22	6.3V
9	NC	23	2.2V
10	2.3V	24	NC
11	3.5V	25	2.1V
12	2.9V	26	3V
13	0V	27	3.5V
14	2.2V	28	0V

IC1104

1	2.2V
2	2.2V
3	2.2V
4	0V
5	2.2V
6	2.2V
7	2.2V
8	5V

IC1201

1	2.5V
2	2.5V
3	2.5V
4	0V
5	2.5V
6	2.5V
7	2.5V
8	5V

IC1202

1	5V
2	0V
3	8.8V

IC1501

1	0V
2	0V
3	6.3V
4	0V
5	0V
6	NC
7	0V
8	6.3V
9	0V
10	NC

	E	C	B
Q1101	6.3V	5V	5.5V
Q1102	3.9V	1.8V	3.2V

[Measuring Conditions]

- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Voltmeter
- Measuring Point Reference : Between Ground
- Measuring Condition : CD : Be playing back the 2nd Music of the test CD (YEDS-18).

NOTE:
1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. $P = \frac{1}{1{,}000{,}000}$

Description of IC Terminal

85312W84 : IC501

No.	Symbol	I/O	Terminal Description
1	Black-Out SEL	I	Black-Out Set Up Input Terminal.
2	ENCODER1	I	Encoder 1 Input Terminal.
3	ENCODER2	I	Encoder 2 Input Terminal.
4	AV_{SS}	—	GND Connection Terminal.
5	BBE Low CONT	O	Low Side D / A Signal Output Terminal to BBE IC.
6	BBE Hi CONT	O	High Side D / A Signal Output Terminal to BBE IC.
7	AV_{REF}	—	V_{DD} Connection Terminal.
8	DTS STS	I	Serial Data Signal Input Terminal from DTS μ-COM.
9	DTS CMD	O	Serial Data Signal Output Terminal to DTS μ-COM.
10	DTS CLK	O	Serial Clock Signal Output Terminal to DTS μ-COM.
11	LCD DO	I	Serial Data Signal Input Terminal from LCD Driver (LC75884W).
12	LCD DI	O	Serial Data Signal Output Terminal to LCD Driver (LC75884W).
13	LCD CLK	O	Serial Clock Signal Output Terminal to LCD Driver (LC75884W).
14	LCD CE	O	CE Signal Output Terminal to LCD Driver (LC75884W).
15	$\overline{\text{LCD RST}}$	O	Reset Signal Output Terminal to LCD Driver (LC75884W).
16	E.VOL DATA	I/O	Serial Data Signal Input / Output Terminal to E-VOL (TDA7461).
17	E.VOL CLK	O	Serial Clock Signal Output Terminal to E-VOL (TDA7461).
18	CD CE	O	Latch Output Terminal for CD Auto Adjustment Monitor.
19	CD CLK	O	Clock Output Terminal for CD Auto Adjustment Monitor.
20	CD DATA	O	Data Output Terminal for CD Auto Adjustment Monitor.
21	SW-DATA	O	Serial Data Signal Output Terminal to Sub-W E-VOL (TEA6324T).
22	SW-CLK	O	Serial Clock Signal Output Terminal to Sub-W E-VOL (TEA6324T).
23	L-CONT	O	Power Control Signal Output Terminal for Disc Detection.
24	NC	—	No Connection Terminal.
25	LOAD FWD	O	Forward Driving Active Signal Output Terminal for Loading Motor.
26	LOAD BWD	O	Backward Driving Active Signal Output Terminal for Loading Motor.
27	NC	—	No Connection Terminal.
28			
29			
30	SW-3	I	Eject End Detection Signal Input Terminal.
31	SW-4	I	Disc Chucking Position Detection Signal Input Terminal.
32	V-CONT	O	CD Power Control Terminal.
33	GND	—	GND Connection Terminal.
34	LIMIT-SW	I	Inner Limit Detection Signal Input Terminal.
35	LSI-RST	O	System Reset Signal Output Terminal to Digital Servo IC (TC9296AF). (Pull-Down Connection)
36	BUS-0	I/O	Communication Input / Output Terminal to CD Signal Processor IC.
37	BUS-1		
38	BUS-2		
39	BUS-3		

No.	Symbol	I/O	Terminal Description
40	BUCK	O	Communication Output Terminal to CD Signal Processor IC.
41	CCE	O	Communication Output Terminal to CD Signal Processor IC.
42	LOCK	I	Lock Status Input Terminal.
43	MUTE	O	Audio Mute Signal Output Terminal. (H : Mute ON)
44	NC	—	No Connection Terminal.
45	DTS MUTE	I	Mute Signal Input Terminal from DTS μ-COM.
46	BUZZER	O	Guide Tone Buzzer Signal Output Terminal.
47 ~ 50	NC	—	No Connection Terminal.
51	DTS STBY	O	Stand-by ON / OFF Signal Output Terminal to DTS μ-COM. (H : STBY ON)
52	NC	—	No Connection Terminal.
53	CFL+B ON	O	Power Control Signal Output Terminal for LCD Backlighting.
54	NOSE POWER	O	Power Control Signal Output Terminal for LCD Driver.
55	POWER ON	O	Power Control Signal Output Terminal for Audio and Key Lighting.
56	○ NC	—	No Connection Terminal.
	△ POWER IC	O	Power IC Stand-by Control Signal Output Terminal.
57	NC	—	No Connection Terminal.
58	$\overline{\text{IN DIMMER}}$	I	Dimmer Control Input Terminal. (L : Dimmer ON)
59	IN INT	I	IN-Interrupt Input Terminal.
60	$\overline{\text{RESET}}$	I	System Reset Signal Input Terminal.
61	REMOCON	I	Remote Control Data Signal Input Terminal.
62	BAT DET	I	Battery Detection Signal Input Terminal.
63	ACC DET	I	ACC Detection Signal Input Terminal.
64	BUS-IN	I	Ai-NET BUS Data Signal Input Terminal.
65	SW-1	I	Disc Insert Detection Signal Input Terminal (1).
66	BUS-OUT	O	Ai-NET BUS Data Signal Output Terminal.
67	SW-2	I	Disc Insert Detection Signal Input Terminal (2).
68	V_{DD}	—	V_{DD} Connection Terminal.
69	X2	—	System Clock OSC Circuit Output Terminal.
70	X1	—	System Clock OSC Circuit Input Terminal.
71	GND	—	GND Connection Terminal.
72	NC	—	No Connection Terminal.
73	GND	—	GND Connection Terminal.
74	AV_{DD}	—	Analog Power Input Terminal of A / D and D / A Converter. (V_{DD} Connection)
75	V_{DD}	—	V_{DD} Connection Terminal.
76	Dig-Out SEL	I	Digital Out Set Up Input Terminal.
77	INTLZ	I	INTLZD Action Cancellation Signal Input Terminal.
78	SUB-W SEL	I	Sub-W Set Up Terminal.
79	T-SENS	I	Temperature Sensor Signal Input Terminal.
80	NOSE ON	I	NOSE ON Detection Terminal.

85089W19: IC502

No.	Symbol	I/O	Terminal Description
1	V_{CC}	—	+5V Connection Terminal.
2	NC	—	No Connection Terminal.
3	X0A	—	GND Connection Terminal.
4	MOD0		
5	MOD1		
6	X0	O	Crystal Connection Terminal. (8MHz)
7	X1	I	
8	V_{SS}	—	GND Connection Terminal.
9	$\overline{\text{RESET}}$	I	Reset Signal Input Terminal. (RESET : L)
10 ~ 22	NC	—	No Connection Terminal.
23	$\overline{\text{AM ST}}$	I	AM ST Signal Input Terminal. (Connection Pull-Down)
24 ~ 33	NC	—	No Connection Terminal.
34	$\overline{\text{A-MUTE}}$	O	Tuner Mute Signal Output Terminal. (MUTE ON : L)
35 ~ 38	GND	—	GND Connection Terminal.
39 ~ 44	NC	—	No Connection Terminal.
45	R_XD	I	RDS Monitor Input Terminal. (Pull-Up Connection)
46	T_XD	O	RDS Monitor Output Terminal.
47 ~ 49	NC	—	No Connection Terminal.
50	V_{CC}	—	V_{CC} Connection Terminal.
51	NC	—	No Connection Terminal.
52			
53	TUNER CLK	I	Clock Signal Input Terminal from Main μ-COM.
54	TUNER SI	I	Serial Input Terminal from Main μ-COM.
55	TUNER SO	O	Serial Output Terminal to Main μ-COM.
56	RDS SDA	I/O	RDS I2C Data Input / Output Terminal.
57	RDS CLK	O	RDS I2C Clock Output Terminal.
58	GND	—	GND Connection Terminal.
59	V_{SS}	—	
60 ~ 62	GND	—	

No.	Symbol	I/O	Terminal Description
63	E2P SDA	I/O	E2P-ROM Data Input / Output Terminal.
64	E2P CLK	O	E2P-ROM Clock Output Terminal.
65 66	NC	—	No Connection Terminal.
67	$\overline{\text{SEEK Req.}}$	O	Seek Speed Control Terminal. (Tuner / / During SEEK : L)
68	GND	—	GND Connection Terminal.
69	$\overline{\text{AF HOLD}}$	O	AF Hold Output Terminal. (Tuner Set Up Hold : L)
70	NC	—	No Connection Terminal.
71	IF MUTE	O	IF Mute Control Terminal. (Pull-Up Connection)
72	FM / $\overline{\text{AM}}$	O	FM / AM Switching Terminal. (FM : H)
73	PLL CLK	O	PLL Clock Output Terminal.
74	PLL DATA	I/O	PLL Data Input / Output Terminal. (Pull-Up Connection)
75	PLL CE	O	PLL CE Output Terminal.
76	SEEK Req.	O	Seek Speed Control Terminal. (Tuner / During SEEK : H)
77	RDS RESET	O	Power ON Reset Terminal of RDS Decoder (SAA6588T).
78	SD	I	SD Input Terminal. (Tuner / Station ON : H)
79	$\overline{\text{PSWN}}$	I	Audio Signal Level Detection Terminal from RDS Decoder (SAA6588T). (No Station : L)
80	$\overline{\text{Auto Adj.}}$	I	Auto Adjustment Terminal. (Auto Adjustment Start : L)
81	NC	—	No Connection Terminal.
82	LO / $\overline{\text{DX}}$	O	Local Seek / DX Seek Switching Terminal. (Tuner / Local Seek : H)
83	NC	—	No Connection Terminal.
84	AV_{SS}	—	GND Connection Terminal.
85	S / M	I	Field Strength Input Terminal. (A / D, Tuner)
86	M / P	I	Multi Path Detection Input Terminal. (A / D, SAA6588T)
87 ~ 92	GND	—	GND Connection Terminal.
93	AV_{CC}	—	V_{CC} Connection Terminal.
94	AVR		
95 96	NC	—	No Connection Terminal.
97	TUNER STBY	I	Stand-by Input Terminal from Main μ-COM.
98	NC	—	No Connection Terminal.
99	DAVN	I	RDS Data Available Input Terminal. (SAA6588T)
100	NC	—	No Connection Terminal.

NOTE : ○ : For CDA-7944R Model Only, △ : For CDA-7842R Model Only, Others : Common.

Electrical Parts List

Resistor : Carbon resistors under 1/4 watts are not mentioned in the parts list, please confirm them by schematic diagram.

Capacitor : μ F=microfarads,pF=picofarads

Abbreviations

RES.= Resistor	CAP.= Capacitor
C.F.= Carbon Film	ELY.= Electrolytic
M.F.= Metal Film	CER.= Ceramic
M.O.= Metal Oxide Film	MYL.= Mylar
M.P.= Metal Plate	TAN.= Tantalum
TR. = Transistor	POLY.= Polystyrol
TRANS.= Transformer	PP. = Polypropylene
CP. = Chip	PLT.= Polyethylene
	PF. = Polyester Film

	Symbol No.	Part No.	Description
	Main P.W.Board		
	IC's		
	IC001	51T15731W10	TC7S66F
	IC002	51T93332F01	NJM2903M
	IC052	51T15132Y01	SAA6588T
	IC111	51T15510W01	MC34063AML
	IC201	51T15404Y01	TDA7461DTR
	IC202	51T15168Y01	TEA6324T
	IC203	51T15420Y01	BA4560F
	IC221	51T95043W01	BA3884F
	IC241	51T92001F21	XRA4560F
○	IC251	51T25576W04	NJM4580E
△	IC251	51T92001F21	XRA4560F
○	IC261	51T25576W04	NJM4580E
△	IC261	51T92001F21	XRA4560F
△	IC301	51T15021Y01	TDA7386
△	IC311	51T15420Y01	BA4560F
△	IC315	51T15420Y01	BA4560F
	IC321	51T90149F03	M5218AFP
	IC501	51T85312W84	85312W84
	IC502	51T85089W19	85089W19
	IC503	51T95563W01	S-80744HL
	IC504	51T15343Y01	ST24C04FM6TR
	IC611	51T95014F13	S-8052HNM-CR
	IC810	51T92001F21	XRA4560F
	IC821	51T45035W02	M5237ML
	IC851	51T93332F01	NJM2903M
	IC852	51T93333F01	NJM2904M
	Transistors/FET		
	Q002	48T62967F03	CP., DTC124K
	Q004	48T62967F09	CP., DTC114TK
	Q020	48T73888F13	CP., FMC3
	Q041	48T73888F12	CP., FMC2
	Q061	48T62967F03	CP., DTC124K
	Q081	48T62967F03	CP., DTC124K
	Q101	48T73888F12	CP., FMC2
	Q102	48T73888F12	CP., FMC2
○	Q110	48T73888F13	CP., FMC3
	Q111	48T15511W02	CP., 2SB1261
	Q112	48T73888F12	CP., FMC2
	Q202	48T62967F03	CP., DTC124K
	Q203	48T62967F03	CP., DTC124K
	Q271	48T63788F04	CP., 2SD1328
	Q272	48T63788F04	CP., 2SD1328
	Q281	48T63788F04	CP., 2SD1328
	Q282	48T63788F04	CP., 2SD1328
	Q291	48T63788F04	CP., 2SD1328
	Q292	48T63788F04	CP., 2SD1328
	Q501	48T92368F04	CP., 2SD1760
	Q502	48T63420F01	CP., 2SA1037K
	Q503	48T62967F02	CP., DTC114K
	Q504	48T62967F02	CP., DTC114K
	Q505	48T63420F01	CP., 2SA1037K
	Q506	48T62967F02	CP., DTC114K
	Q507	48T62967F03	CP., DTC124K
	Q511	48T62967F09	CP., DTC114TK
	Q512	48T62966F03	CP., DTA124
	Q513	48T73888F12	CP., FMC2
	Q601	48T62967F03	CP., DTC124K
	Q801	48T84366F04	2SB1243
	Q802	48T62967F05	CP., DTC143XK
	Q803	48T73888F12	CP., FMC2
○	Q804	48T52443F04	FET, CP. 2SK198
○	Q806	48T69176F02	2SC3421
△	Q806	48T93828F01	2SD1994A
	Q821	48T84234F04	2SB1238
	Q822	48T84234F04	2SB1238
	Q823	48T62967F03	CP., DTC124K
	Q824	48T56030F04	2SB941
	Q825	48T52438F01	CP., 2SD601A
	Q831	48T92368F04	CP., 2SD1760
	Q832	48T73888F13	CP., FMC3
	Q842	48T62966F01	CP., DTA143
	Q843	48T62967F03	CP., DTC124K
	Q851	48T52437F01	CP., 2SB709A
	Q852	48T62966F03	CP., DTA124
	Q853	48T52438F01	CP., 2SD601A
	Q871	48T84366F04	2SB1243
	Q872	48T63420F01	CP., 2SA1037K
	Q875	48T62967F02	CP., DTC114K

NOTE : ○ : For CDA-7944R Model Only, △ : For CDA-7842R Model Only, Others : Common.

Symbol No.	Part No.	Description
	Q876	48T62967F03 CP., DTC124K
	Q891	48T73888F12 CP., FMC2
△	Q893	48T62967F03 CP., DTC124K
	Diodes	
	D002	48T15437Y01 CP., HSM123
	D111	48T85269W02 SB040
	D271	48T75404W01 CP., 1SS353
	D272	48T75404W01 CP., 1SS353
	D281	48T75404W01 CP., 1SS353
	D282	48T75404W01 CP., 1SS353
	D291	48T75404W01 CP., 1SS353
	D292	48T75404W01 CP., 1SS353
△	D301	48T15512W01 CP., DSM10
△	D302	48T15512W01 CP., DSM10
	D501	48T75404W01 CP., 1SS353
	D502	48T63462F01 CP., DAN202K
	D511	48T68828F11 1SS133
	D611	48T68828F11 1SS133
	D801	48T68580F03 DSA3A4
△	D803	48T15512W01 CP., DSM10
△	D804	48T15512W01 CP., DSM10
△	D805	48T15512W01 CP., DSM10
△	D806	48T15512W01 CP., DSM10
△	D807	48T15512W01 CP., DSM10
△	D808	48T15512W01 CP., DSM10
	D842	48T63462F01 CP., DAN202K
	D851	48T68828F11 1SS133
	D852	48T63463F01 CP., DAP202K
	D853	48T63462F01 CP., DAN202K
	D871	48T85270W02 MPG06G
	D872	48T85357W01 CP., 1PS226
	D892	48T85270W02 MPG06G
	ZD501	48T25766W03 Zener, HZS6A3L
	ZD502	48T90517F22 Zener, HZS4.7NB3
	ZD511	48T25766W18 Zener, HZS7C3L
	ZD806	48T25766W24 Zener, HZS9C1L
	ZD821	48T25766W03 Zener, HZS6A3L
	ZD831	48T25766W31 Zener, HZS11B2L
	Buzzer	
	BZ601	50T85541W01 CD11PA-XZ

Symbol No.	Part No.	Description
	Crystals	
	XL051	91T85169W18 4.332MHz
	XL501	91T85169W17 4.1943MHz
	XL503	91T85169W44 7.3728MHz
	Coils	
	L001	24T65172W17 Inductor, CP. 4.7μH
	L002	24T16403W29 Inductor, CP. 15μH
	L003	24T15267Y01 7TL
	L101	24T16271W13 220μH
○	L110	24T65053W22 Inductor, CP. 10μH
	L111	24T16271W13 220μH
	L503	24T16403W15 Inductor, CP. 1μH
	L504	24T16403W15 Inductor, CP. 1μH
	L801	24T75055W08 Choke
	Surge Protector	
	DSP001	48T81048F02 DSP-201M
	Switches	
	SW611	40T16096W03 Tact, SKHHLW (RESET)
	SW801	40T45282W01 Slide, SLD-42-508 (Ai-NET • NORM/(EQ/DIV))
	Filters	
	LPF001	91T75257W02 LPF, LPF11830KH
	Z005	91T65112W06 EMI, CP. BK2125HM102
	Z030	91T65112W06 EMI, CP. BK2125HM102
	Z035	91T65112W06 EMI, CP. BK2125HM102
	Z036	91T65112W06 EMI, CP. BK2125HM102
	Z037	91T65112W06 EMI, CP. BK2125HM102
	Z040	91T65112W06 EMI, CP. BK2125HM102
	Z058	91T65112W06 EMI, CP. BK2125HM102
	Z060	91T65112W06 EMI, CP. BK2125HM102
	Thermistor	
	TH501	48T93439F06 100K ohm

NOTE : ○ : For CDA-7944R Model Only, △ : For CDA-7842R Model Only, Others : Common.

Symbol No.	Part No.	Description
	Capacitors	
	C003	08T15399W04	CP., 0.027µF
	C004	08T15399W04	CP., 0.027µF
	C005	08T15399W04	CP., 0.027µF
	C006	08S65128F67	CP., 6800pF
	C007	08S82122F37	CP., 100pF
	C008	08S82122F61	CP., 1000pF
	C009	08S82122F53	CP., 470pF
	C010	08S35374W01	CP., 0.1µF
	C041	08T15399W01	CP., 0.022µF
	C054	08S53332F47	CP., 0.01µF
	C055	08S82122F49	CP., 330pF
	C057	08S82122F55	CP., 560pF
	C058	08S65128F61	CP., 2200pF
	C060	08S65128F61	CP., 2200pF
	C063	08S82122F13	CP., 10pF
	C064	08S35374W01	CP., 0.1µF
	C065	08S82122F23	CP., 27pF
	C066	08S82122F24	CP., 30pF
	C068	08S82122F37	CP., 100pF
	C101	08T15399W04	CP., 0.027µF
○	C109	08T15399W04	CP., 0.027µF
○	C110	08T15399W04	CP., 0.027µF
	C111	08T15399W04	CP., 0.027µF
	C112	08S82122F39	CP., 120pF
	C113	08T15399W04	CP., 0.027µF
	C203	08S35374W01	CP., 0.1µF
	C204	08S35374W01	CP., 0.1µF
	C206	08S35374W01	CP., 0.1µF
	C221	08S65128F69	CP., 0.01µF
	C222	08T15399W03	CP., 0.047µF
	C223	08T15399W03	CP., 0.047µF
	C224	08S65128F69	CP., 0.01µF
	C225	08S82122F53	CP., 470pF
	C226	08T15399W05	CP., 0.068µF
	C227	08T15399W05	CP., 0.068µF
	C228	08S82122F53	CP., 470pF
	C231	08S65128F69	CP., 0.01µF
	C235	08T15399W02	CP., 0.033µF
	C236	08T15399W02	CP., 0.033µF
	C239	08T55390W14	PF., 5600pF
	C240	08T55390W14	PF., 5600pF
	C241	08S82122F27	CP., 39pF
	C242	08S82122F27	CP., 39pF
	C251	08S82122F27	CP., 39pF
	C252	08S82122F27	CP., 39pF
	C261	08S82122F27	CP., 39pF
	C262	08S82122F27	CP., 39pF
	C263	08S65128F58	CP., 1200pF
	C264	08T55390W29	TF, 0.1µF
	C265	08T55390W29	TF, 0.1µF
	C266	08T15399W04	CP., 0.027µF
	C267	08S82122F61	CP., 1000pF
	C268	08S82122F63	CP., 3300pF
	C301	08S35374W01	CP., 0.1µF
△	C302	08S82122F37	CP., 100pF
△	C311	08S82122F21	CP., 22pF
△	C312	08S82122F21	CP., 22pF
△	C313	08S82122F21	CP., 22pF
△	C314	08S82122F21	CP., 22pF
	C321	08S82122F25	CP., 33pF
	C322	08S82122F25	CP., 33pF
	C323	08S82122F25	CP., 33pF
	C324	08S82122F25	CP., 33pF
	C501	08T15399W04	CP., 0.027µF
	C502	08S82122F19	CP., 18pF
	C503	08S82122F19	CP., 18pF
	C510	08T15399W04	CP., 0.027µF
	C511	08S65128F69	CP., 0.01µF
	C512	08S82122F19	CP., 18pF
	C513	08S82122F17	CP., 15pF
	C515	08S82122F37	CP., 100pF
	C516	08S82122F65	CP., 1500pF
	C517	08S35374W01	CP., 0.1µF
	C541	08T15399W04	CP., 0.027µF
	C601	08S82122F53	CP., 470pF
	C850	08T15399W04	CP., 0.027µF
	C851	08S82122F37	CP., 100pF
	C852	08S82122F23	CP., 27pF
	C888	08S82122F37	CP., 100pF
	C892	08T35122W23	PF., 0.68µF
	C896	08T55390W31	TF, 0.15µF
	C897	08S35374W01	CP., 0.1µF
○	E001	23T75462W06	ELY., 100µF / 10V
△	E001	23S75372W02	ELY., 100µF / 10V
○	E003	23T75462W07	ELY., 220µF / 10V
△	E003	23S75372W03	ELY., 220µF / 10V
○	E004	23T75462W09	ELY., 22µF / 16V
△	E004	23S75372W05	ELY., 22µF / 16V
○	E005	23T75462W19	ELY., 0.33µF / 50V
△	E005	23S75372W12	ELY., 0.33µF / 50V
○	E007	23T75462W22	ELY., 1µF / 50V
△	E007	23S75372W15	ELY., 1µF / 50V
○	E008	23T75462W08	ELY., 10µF / 16V
△	E008	23S75372W04	ELY., 10µF / 16V
○	E052	23T75462W06	ELY., 100µF / 10V
△	E052	23S75372W02	ELY., 100µF / 10V

NOTE : ○ : For CDA-7944R Model Only, △ : For CDA-7842R Model Only, Others : Common.

Symbol No.	Part No.	Description
○ E053	23T75462W23	ELY., 2.2μF / 50V
△ E053	23S75372W16	ELY., 2.2μF / 50V
○ E101	23T75462W23	ELY., 2.2μF / 50V
△ E101	23S75372W16	ELY., 2.2μF / 50V
○ E110	23T75462W08	ELY., 10μF / 16V
○ E111	23T75462W12	ELY., 100μF / 16V
△ E111	23S75372W08	ELY., 100μF / 16V
E112	23T55378W03	ELY., 470μF / 10V
○ E201	23T75462W30	ELY., 4.7μF / 25V
△ E201	23S75372W09	ELY., 4.7μF / 35V
○ E202	23T75462W30	ELY., 4.7μF / 25V
△ E202	23S75372W09	ELY., 4.7μF / 35V
○ E205	23T75462W30	ELY., 4.7μF / 25V
△ E205	23S75372W09	ELY., 4.7μF / 35V
○ E206	23T75462W30	ELY., 4.7μF / 25V
△ E206	23S75372W09	ELY., 4.7μF / 35V
○ E207	23T75462W30	ELY., 4.7μF / 25V
△ E207	23S75372W09	ELY., 4.7μF / 35V
○ E208	23T75462W30	ELY., 4.7μF / 25V
△ E208	23S75372W09	ELY., 4.7μF / 35V
○ E209	23T75462W08	ELY., 10μF / 16V
△ E209	23S75372W04	ELY., 10μF / 16V
○ E210	23T75462W08	ELY., 10μF / 16V
△ E210	23S75372W04	ELY., 10μF / 16V
○ E211	23T75462W09	ELY., 22μF / 16V
△ E211	23S75372W05	ELY., 22μF / 16V
○ E212	23T75462W24	ELY., 3.3μF / 50V
△ E212	23S75372W09	ELY., 4.7μF / 35V
○ E213	23T75462W23	ELY., 2.2μF / 50V
△ E213	23S75372W16	ELY., 2.2μF / 50V
○ E214	23T75462W23	ELY., 2.2μF / 50V
△ E214	23S75372W16	ELY., 2.2μF / 50V
○ E215	23T75462W23	ELY., 2.2μF / 50V
△ E215	23S75372W16	ELY., 2.2μF / 50V
○ E216	23T75462W23	ELY., 2.2μF / 50V
△ E216	23S75372W16	ELY., 2.2μF / 50V
○ E217	23T75462W21	ELY., 0.68μF / 50V
△ E217	23S75372W14	ELY., 0.68μF / 50V
○ E218	23T75462W08	ELY., 10μF / 16V
△ E218	23S75372W04	ELY., 10μF / 16V
○ E219	23T75462W08	ELY., 10μF / 16V
△ E219	23S75372W04	ELY., 10μF / 16V
○ E221	23T75462W22	ELY., 1μF / 50V
△ E221	23S75372W15	ELY., 1μF / 50V
○ E222	23T75462W30	ELY., 4.7μF / 25V
△ E222	23S75372W09	ELY., 4.7μF / 35V
○ E223	23T75462W30	ELY., 4.7μF / 25V
△ E223	23S75372W09	ELY., 4.7μF / 35V
○ E224	23T75462W30	ELY., 4.7μF / 25V

Symbol No.	Part No.	Description
△ E224	23S75372W09	ELY., 4.7μF / 35V
○ E225	23T75462W30	ELY., 4.7μF / 25V
△ E225	23S75372W09	ELY., 4.7μF / 35V
○ E226	23T75462W30	ELY., 4.7μF / 25V
△ E226	23S75372W09	ELY., 4.7μF / 35V
○ E227	23T75462W30	ELY., 4.7μF / 25V
△ E227	23S75372W09	ELY., 4.7μF / 35V
○ E228	23T75462W22	ELY., 1μF / 50V
△ E228	23S75372W15	ELY., 1μF / 50V
○ E229	23T75462W21	ELY., 0.68μF / 50V
△ E229	23S75372W14	ELY., 0.68μF / 50V
○ E230	23T75462W21	ELY., 0.68μF / 50V
△ E230	23S75372W14	ELY., 0.68μF / 50V
○ E235	23S75372W11	ELY., 47μF / 16V
△ E235	23S75372W07	ELY., 47μF / 16V
○ E236	23T75462W12	ELY., 100μF / 16V
△ E236	23S75372W08	ELY., 100μF / 16V
○ E237	23T75462W19	ELY., 0.33μF / 50V
△ E237	23S75372W12	ELY., 0.33μF / 50V
○ E238	23T45365W04	ELY., 47μF / 25V
△ E238	23S75372W07	ELY., 47μF / 16V
○ E239	23T45365W04	ELY., 47μF / 25V
△ E239	23S75372W07	ELY., 47μF / 16V
○ E240	23T75462W09	ELY., 22μF / 16V
△ E240	23S75372W05	ELY., 22μF / 16V
○ E241	23T75462W20	ELY., 0.47μF / 50V
△ E241	23S75372W12	ELY., 0.33μF / 50V
○ E242	23T75462W20	ELY., 0.47μF / 50V
△ E242	23S75372W12	ELY., 0.33μF / 50V
△ E243	23S95415W06	ELY., 100μF / 16V
○ E251	23T75462W20	ELY., 0.47μF / 50V
△ E251	23S75372W12	ELY., 0.33μF / 50V
○ E252	23T75462W20	ELY., 0.47μF / 50V
△ E252	23S75372W12	ELY., 0.33μF / 50V
○ E261	23T75462W20	ELY., 0.47μF / 50V
△ E261	23S75372W12	ELY., 0.33μF / 50V
○ E262	23T75462W20	ELY., 0.47μF / 50V
△ E262	23S75372W12	ELY., 0.33μF / 50V
○ E271	23T75462W08	ELY., 10μF / 16V
△ E271	23S75372W04	ELY., 10μF / 16V
○ E272	23T75462W08	ELY., 10μF / 16V
△ E272	23S75372W04	ELY., 10μF / 16V
○ E281	23T75462W24	ELY., 3.3μF / 50V
△ E281	23S75372W17	ELY., 3.3μF / 50V
○ E282	23T75462W24	ELY., 3.3μF / 50V
△ E282	23S75372W17	ELY., 3.3μF / 50V
○ E291	23T75462W24	ELY., 3.3μF / 50V
△ E291	23S75372W17	ELY., 3.3μF / 50V
○ E292	23T75462W24	ELY., 3.3μF / 50V

NOTE : ○ : For CDA-7944R Model Only, △ : For CDA-7842R Model Only, Others : Common.

Symbol No.		Part No.	Description	
△	E292	23S75372W17	ELY.,	3.3μF / 50V
△	E301	23T95115W01	ELY.,	0.33μF / 50V
△	E302	23T95115W01	ELY.,	0.33μF / 50V
△	E303	23T95115W01	ELY.,	0.33μF / 50V
△	E304	23T95115W01	ELY.,	0.33μF / 50V
△	E305	23S75372W07	ELY.,	47μF / 16V
△	E306	23T95115W02	ELY.,	1μF / 50V
	E307	23T35505W06	ELY.,	4700μF / 16V
△	E308	23S95415W17	ELY.,	1μF / 50V
△	E311	23S75372W12	ELY.,	0.33μF / 50V
△	E312	23S75372W04	ELY.,	10μF / 16V
△	E313	23S75372W04	ELY.,	10μF / 16V
△	E315	23S75372W12	ELY.,	0.33μF / 50V
△	E316	23S75372W04	ELY.,	10μF / 16V
△	E317	23S75372W04	ELY.,	10μF / 16V
○	E321	23T75462W30	ELY.,	4.7μF / 25V
△	E321	23S75372W09	ELY.,	4.7μF / 35V
○	E322	23T75462W30	ELY.,	4.7μF / 25V
△	E322	23S75372W09	ELY.,	4.7μF / 35V
○	E323	23T75462W30	ELY.,	4.7μF / 25V
△	E323	23S75372W09	ELY.,	4.7μF / 35V
○	E324	23T75462W30	ELY.,	4.7μF / 25V
△	E324	23S75372W09	ELY.,	4.7μF / 35V
○	E325	23T75462W21	ELY.,	0.68μF / 50V
△	E325	23S75372W14	ELY.,	0.68μF / 50V
○	E501	23T75462W07	ELY.,	220μF / 10V
△	E501	23S75372W03	ELY.,	220μF / 10V
○	E502	23T75462W22	ELY.,	1μF / 50V
△	E502	23S75372W15	ELY.,	1μF / 50V
○	E503	23T75462W08	ELY.,	10μF / 16V
△	E503	23S75372W04	ELY.,	10μF / 16V
○	E504	23T75462W07	ELY.,	220μF / 10V
△	E504	23S75372W03	ELY.,	220μF / 10V
○	E505	23T75462W09	ELY.,	22μF / 16V
△	E505	23S75372W05	ELY.,	22μF / 16V
○	E511	23T75462W17	ELY.,	0.1μF / 50V
△	E511	23S75372W10	ELY.,	0.1μF / 50V
○	E611	23T75462W08	ELY.,	10μF / 16V
△	E611	23S75372W04	ELY.,	10μF / 16V
○	E801	23T00134L29	ELY.,	33μF / 16V
△	E801	23S75372W06	ELY.,	33μF / 16V
○	E802	23S75462W11	ELY.,	47μF / 16V
△	E802	23S75372W07	ELY.,	47μF / 16V
○	E806	23T75462W06	ELY.,	100μF / 10V
△	E806	23S75372W02	ELY.,	100μF / 10V
○	E807	23T00134L29	ELY.,	33μF / 16V
△	E807	23S75372W06	ELY.,	33μF / 16V
○	E810	23T75462W21	ELY.,	0.68μF / 50V
△	E810	23S75372W14	ELY.,	0.68μF / 50V

Symbol No.		Part No.	Description	
○	E811	23T75462W06	ELY.,	100μF / 10V
△	E811	23S75372W02	ELY.,	100μF / 10V
○	E812	23T75462W21	ELY.,	0.68μF / 50V
△	E812	23S75372W14	ELY.,	0.68μF / 50V
	E821	23T74437F41	TAN.,	10μF / 25V
○	E822	23T75462W08	ELY.,	10μF / 16V
△	E822	23S75372W04	ELY.,	10μF / 16V
	E823	23T74437F41	TAN.,	10μF / 25V
○	E830	23T75462W12	ELY.,	100μF / 16V
△	E830	23S75372W08	ELY.,	100μF / 16V
○	E831	23T75462W22	ELY.,	1μF / 50V
△	E831	23S75372W15	ELY.,	1μF / 50V
	E832	23T75462W12	ELY.,	100μF / 16V
	E833	23T75462W06	ELY.,	100μF / 10V
○	E841	23T75462W08	ELY.,	10μF / 16V
△	E841	23S75372W04	ELY.,	10μF / 16V
○	E851	23T75462W08	ELY.,	10μF / 16V
△	E851	23S75372W04	ELY.,	10μF / 16V
○	E871	23T75462W08	ELY.,	10μF / 16V
△	E871	23S75372W04	ELY.,	10μF / 16V
△	E892	23S75372W04	ELY.,	10μF / 16V

Resistors			(All resistors are chip 1/10W±5% unless otherwise noted.)
	R001	06S95434W25	10 ohm 1/4W
	R005	06S95432W95	27K ohm
	R006	06S95433W18	220K ohm
	R008	06S95433W10	100K ohm
	R013	06S95432W81	6.8K ohm
	R014	06S95433W12	120K ohm
	R015	06S95432W76	4.3K ohm
	R016	06S95432W93	22K ohm
	R017	06S95432W93	22K ohm
	R018	06S95432W79	5.6K ohm
	R019	06S95432W61	1K ohm
	R020	06S95432W61	1K ohm
	R021	06S95432W61	1K ohm
	R022	06S95432W85	10K ohm
	R023	06S95433W02	47K ohm
	R026	06S95432W91	18K ohm
	R027	06S95432W93	22K ohm
	R031	06S95432W85	10K ohm
	R032	06S95432W93	22K ohm
	R033	06S95432W94	24K ohm
	R034	06S95432W93	22K ohm
	R042	06S95432W55	560 ohm
	R043	06S95433W02	47K ohm
	R044	06S95432W61	1K ohm

NOTE : ○ : For CDA-7944R Model Only, △ : For CDA-7842R Model Only, Others : Common.

Symbol No.	Part No.	Description
R045	06S95433W18	220K ohm
R051	06S95432W61	1K ohm
R053	06S95433W26	470K ohm
R054	06S95432W47	270 ohm
R055	06S95432W47	270 ohm
R056	06S95432W61	1K ohm
R057	06S95432W13	10 ohm
R058	06S95432W69	2.2K ohm
R059	06S95432W61	1K ohm
R072	06S64996F30	2.2M ohm
R101	06S95432W93	22K ohm
R102	06S95432W93	22K ohm
R103	06S95432W93	22K ohm
R104	06S95432W93	22K ohm
R111	06S95434W67	560 ohm 1/4W
R112	06S95434W49	100 ohm 1/4W
R113	06S95434W67	560 ohm 1/4W
R114	06T15443W85	22K ohm
R115	06T15443W71	5.6K ohm
R201	06S95432W61	1K ohm
R202	06S95432W61	1K ohm
R204	06S95433W04	56K ohm
R205	06S95433W04	56K ohm
R208	06S95433W19	240K ohm
R209	06S95434W70	750 ohm 1/4W
R210	06S95434W70	750 ohm 1/4W
R221	06S95434W75	1.2K ohm 1/4W
R222	06S95434W75	1.2K ohm 1/4W
R223	06S95434W87	3.9K ohm 1/4W
R224	06S95434W87	3.9K ohm 1/4W
R225	06S95432W83	8.2K ohm
R226	06S95432W99	39K ohm
R227	06S95434W73	1K ohm 1/4W
R236	06S95432W61	1K ohm
R238	06S95432W61	1K ohm
R241	06S95433W10	100K ohm
R242	06S95433W10	100K ohm
R243	06S95432W82	7.5K ohm
R244	06S95432W82	7.5K ohm
R247	06S95432W92	20K ohm
R248	06S95432W92	20K ohm
R249	06S95434W57	220 ohm 1/4W
R250	06S95434W57	220 ohm 1/4W
R251	06S95433W10	100K ohm
R252	06S95433W10	100K ohm
R253	06S95434W92	6.2K ohm 1/4W
R254	06S95434W92	6.2K ohm 1/4W
R257	06S95434W97	10K ohm 1/4W
R258	06S95434W97	10K ohm 1/4W

Symbol No.	Part No.	Description
R259	06S95434W57	220 ohm 1/4W
R260	06S95434W57	220 ohm 1/4W
R261	06S95433W10	100K ohm
R262	06S95433W10	100K ohm
R263	06S95434W92	6.2K ohm 1/4W
R264	06S95434W92	6.2K ohm 1/4W
R267	06S95434W97	10K ohm 1/4W
R268	06S95434W97	10K ohm 1/4W
R269	06S95434W57	220 ohm 1/4W
R270	06S95434W57	220 ohm 1/4W
R271	06S95432W93	22K ohm
R272	06S95432W93	22K ohm
R273	06S95434W49	100 ohm 1/4W
R274	06S95434W49	100 ohm 1/4W
R275	06S95432W78	5.1K ohm
R276	06S95432W78	5.1K ohm
R279	06S95432W99	39K ohm
R281	06S95432W78	5.1K ohm
R282	06S95432W78	5.1K ohm
R283	06S95432W93	22K ohm
R284	06S95432W93	22K ohm
R285	06S95434W49	100 ohm 1/4W
R286	06S95434W49	100 ohm 1/4W
R291	06S95432W78	5.1K ohm
R292	06S95432W78	5.1K ohm
R293	06S95432W93	22K ohm
R294	06S95432W93	22K ohm
R295	06S95434W49	100 ohm 1/4W
R296	06S95434W49	100 ohm 1/4W
△ R301	06S95432W85	10K ohm
△ R302	06S95434W57	220 ohm 1/4W
△ R303	06S95434W57	220 ohm 1/4W
△ R304	06S95434W57	220 ohm 1/4W
△ R305	06S95434W57	220 ohm 1/4W
△ R306	06S95432W93	22K ohm
△ R307	06S95432W93	22K ohm
△ R308	06S95432W93	22K ohm
△ R309	06S95432W93	22K ohm
△ R311	06S95434W92	6.2K ohm 1/4W
△ R312	06S95434W92	6.2K ohm 1/4W
△ R313	06S95434W97	10K ohm 1/4W
△ R314	06S95434W97	10K ohm 1/4W
△ R315	06S95434W92	6.2K ohm 1/4W
△ R316	06S95434W92	6.2K ohm 1/4W
△ R317	06S95434W97	10K ohm 1/4W
△ R318	06S95434W97	10K ohm 1/4W
R321	06T15443W86	24K ohm
R322	06T15443W86	24K ohm
R323	06T15443W86	24K ohm

NOTE : △ : For CDA-7842R Model Only, Others : Common.

	Symbol No.	Part No.	Description
	R324	06T15443W86	24K ohm
	R325	06T15443W86	24K ohm
	R326	06T15443W86	24K ohm
	R327	06T15443W86	24K ohm
	R328	06T15443W86	24K ohm
	R331	06S95434W83	2.7K ohm 1/4W
	R332	06S95434W83	2.7K ohm 1/4W
	R333	06S95434W97	10K ohm 1/4W
	R334	06S95434W97	10K ohm 1/4W
	R400	06T25009Y01	M.F., 7.5 ohm 2W
	R401	06S95432W85	10K ohm
	R402	06S95432W61	1K ohm
	R403	06S95432W61	1K ohm
	R404	06S95432W61	1K ohm
	R405	06S95432W61	1K ohm
	R406	06S95432W61	1K ohm
	R407	06S95432W61	1K ohm
	R408	06S95432W61	1K ohm
	R409	06S95432W61	1K ohm
	R410	06S95432W87	12K ohm
	R501	06S95434W88	4.3K ohm 1/4W
	R502	06S95432W69	2.2K ohm
	R503	06S95434W25	10 ohm 1/4W
	R504	06S95432W85	10K ohm
	R505	06S95432W93	22K ohm
	R506	06S95432W93	22K ohm
○	R507	06S95432W93	22K ohm
△	R508	06S95432W93	22K ohm
	R509	06S95432W61	1K ohm
	R510	06S95432W61	1K ohm
	R511	06S95434W89	4.7K ohm 1/4W
	R512	06S95434W89	4.7K ohm 1/4W
	R513	06S95432W93	22K ohm
	R514	06S95432W93	22K ohm
	R515	06S95433W10	100K ohm
	R516	06S95432W61	1K ohm
	R517	06S95432W61	1K ohm
	R518	06S95432W61	1K ohm
	R519	06S95432W61	1K ohm
	R520	06S95432W61	1K ohm
	R521	06S95432W61	1K ohm
	R522	06S95433W08	82K ohm
	R523	06S95433W08	82K ohm
	R524	06S95433W26	470K ohm
	R525	06S95433W26	470K ohm
	R526	06S95433W26	470K ohm
	R528	06S95432W93	22K ohm
	R529	06S95432W77	4.7K ohm
	R530	06S95432W61	1K ohm

	Symbol No.	Part No.	Description
	R531	06S95432W61	1K ohm
	R532	06S95432W61	1K ohm
	R533	06S95432W61	1K ohm
	R534	06S95432W61	1K ohm
	R535	06S95432W61	1K ohm
	R536	06S95432W61	1K ohm
	R539	06S95434W57	220 ohm 1/4W
	R540	06S95433W02	47K ohm
	R541	06S95432W85	10K ohm
	R543	06S95432W93	22K ohm
	R544	06S95432W93	22K ohm
	R545	06S95432W85	10K ohm
	R546	06S95432W69	2.2K ohm
	R547	06S95432W73	3.3K ohm
	R548	06S95432W37	100 ohm
	R551	06S95432W85	10K ohm
	R552	06S95432W85	10K ohm
	R553	06S95432W93	22K ohm
	R554	06S95432W93	22K ohm
△	R555	06S95432W93	22K ohm
○	R556	06S95432W93	22K ohm
	R557	06S95433W26	470K ohm
	R558	06S95432W85	10K ohm
	R559	06S95432W93	22K ohm
	R560	06S95432W85	10K ohm
	R561	06S95432W85	10K ohm
	R562	06S95432W85	10K ohm
	R563	06S95432W93	22K ohm
	R564	06S95433W02	47K ohm
	R565	06S95432W93	22K ohm
	R566	06S95432W85	10K ohm
	R567	06S95432W69	2.2K ohm
	R568	06S95432W61	1K ohm
	R569	06S95432W61	1K ohm
	R570	06S95432W61	1K ohm
	R571	06S95432W61	1K ohm
	R572	06S95432W61	1K ohm
	R575	06S95432W61	1K ohm
	R580	06S95432W61	1K ohm
	R581	06S95432W61	1K ohm
	R582	06S95432W61	1K ohm
	R601	06S95434W73	1K ohm 1/4W
	R602	06S95432W85	10K ohm
	R611	06S95432W93	22K ohm
	R612	06S95432W77	4.7K ohm
	R613	06S95432W71	2.7K ohm
	R801	06S95434W79	1.8K ohm 1/4W
	R802	06S95434W79	1.8K ohm 1/4W
	R803	06S95434W79	1.8K ohm 1/4W

NOTE : ○ : For CDA-7944R Model Only, △ : For CDA-7842R Model Only, Others : Common.

Symbol No.	Part No.	Description
	R804	06S95434W79	1.8K ohm 1/4W
	R805	06S95434W97	10K ohm 1/4W
△	R806	06S95434W63	390 ohm 1/4W
	R810	06S95434W70	750 ohm 1/4W
	R811	06S95434W70	750 ohm 1/4W
	R821	06S95432W73	3.3K ohm
	R822	06S95434W73	1K ohm 1/4W
	R823	06S95432W85	10K ohm
	R824	06S95434W79	1.8K ohm 1/4W
	R825	06T15443W86	24K ohm
	R827	06T15443W68	4.3K ohm
	R828	06S95434W57	220 ohm 1/4W
	R829	06S95434W93	6.8K ohm 1/4W
	R831	06S95434W63	390 ohm 1/4W
	R832	06S95434W19	5.6 ohm 1/4W
	R842	06S95433W02	47K ohm
	R843	06S95434W97	10K ohm 1/4W
	R844	06S95432W85	10K ohm
	R845	06S95434W59	270 ohm 1/4W
	R846	06S95434W59	270 ohm 1/4W
	R851	06S95432W85	10K ohm
	R852	06S95432W77	4.7K ohm
	R853	06S95432W63	1.2K ohm
	R854	06S95434W25	10 ohm 1/4W
	R855	06S95432W85	10K ohm
	R856	06S95434W39	39 ohm 1/4W
	R857	06S95434W39	39 ohm 1/4W
	R858	06S95432W69	2.2K ohm
	R859	06S95432W65	1.5K ohm
	R860	06S95432W81	6.8K ohm
	R861	06S95432W81	6.8K ohm
	R862	06S95434W39	39 ohm 1/4W
	R863	06S95434W39	39 ohm 1/4W
	R864	06S95432W65	1.5K ohm
	R865	06S95432W69	2.2K ohm
	R866	06S95432W85	10K ohm
	R867	06S95432W85	10K ohm
	R871	06S95434W23	8.2 ohm 1/4W
	R872	06S95434W23	8.2 ohm 1/4W
	R873	06S95434W23	8.2 ohm 1/4W
	R874	06S95434W97	10K ohm 1/4W
	R878	06S95434W79	1.8K ohm 1/4W
	R879	06S95434W79	1.8K ohm 1/4W
	R880	06S95432W85	10K ohm
	R881	06S95434W23	8.2 ohm 1/4W
	R882	06S95434W97	10K ohm 1/4W
	R883	06S95434W81	2.2K ohm 1/4W
	R884	06S95432W85	10K ohm
△	R892	06S95432W85	10K ohm
△	R893	06S95434W57	220 ohm 1/4W
△	R894	06S95432W89	15K ohm
	R895	06S95434W70	750 ohm 1/4W
	R896	06S95434W70	750 ohm 1/4W
	R898	06S95432W85	10K ohm
	VR201	18T55283W22	Variable, CP. 330K ohm

Front P.W.Board

IC's

IC401	51T15488Y01	LC75884W
IC402	51T95040W01	SBX8035F

Transistors

Q401	48T94606F03	CP., DTC124EU
Q402	48T25196W01	CP., 2SC2412KLU
Q403	48T94606F03	CP., DTC124EU
Q404	48T25196W01	CP., 2SC2412KLU
Q405	48T94606F03	CP., DTC124EU
Q406	48T94606F03	CP., DTC124EU
Q407	48T62967F03	CP., DTC124K
Q408	48T63461F01	CP., 2SC2411K
Q409	48T63461F01	CP., 2SC2411K

Diodes

D401	48T64134F01	CP., DA204K
D402	48T64134F01	CP., DA204K
D403	48T64134F01	CP., DA204K
D404	48T64134F01	CP., DA204K
D405	48T64134F01	CP., DA204K
D406	48T64134F01	CP., DA204K
D416	48T81063F01	CP., MA159
D417	48T81063F01	CP., MA159
ZD401	48T62934F26	Zener, CP. RD6.2MB3

Inverter

INV1	01T95281W06	Assy., DC-AC Inverter Unit

NOTE : ○ : For CDA-7944R Model Only, △ : For CDA-7842R Model Only, Others : Common.

Symbol No.	Part No.	Description
Lamps		
○	PL401	65T75233W03 CP., 6V-80mA
△	PL401	65T75233W01 CP., 6V-80mA
○	PL402	65T75233W03 CP., 6V-80mA
△	PL402	65T75233W01 CP., 6V-80mA
○	PL403	65T85350W02 6V-80mA
△	PL403	65T85350W01 6V-80mA
○	PL404	65T85350W02 6V-80mA
△	PL404	65T85350W01 6V-80mA
○	PL405	65T75233W03 CP., 6V-80mA
△	PL405	65T75233W01 CP., 6V-80mA
○	PL406	65T75233W03 CP., 6V-80mA
△	PL406	65T75233W01 CP., 6V-80mA
	PL407	65T75522W02 CP., 9V-85mA
	PL408	65T75522W02 CP., 9V-85mA
○	PL409	65T85350W02 6V-80mA
△	PL409	65T85350W01 6V-80mA
LED's		
	LD401	48T65477W02 CP., SML-010LTT87 (RED)
	LD402	48T65477W03 CP., SML-010PTT87 (GRN)
	LD405	48T85553W01 CP., SML-211DT (ORG)
	LD406	48T85553W01 CP., SML-211DT (ORG)
Switches		
	SW401	40T55656W06 Tact, CP. SKQMAJ001 (PWR/INTLZ)
	SW402	40T55656W06 Tact, CP. SKQMAJ001 (FWD/UP)
	SW403	40T55656W06 Tact, CP. SKQMAJ001 (TUNE/A.ME)
	SW404	40T55656W06 Tact, CP. SKQMAJ001 (DN/BWD)
	SW406	40T55656W06 Tact, CP. SKQMAJ001 (SOURCE)
	SW407	40T55656W06 Tact, CP. SKQMAJ001 (BAND/T.S.M.)
	SW408	40T55656W06 Tact, CP. SKQMAJ001 (PLAY/PAUSE/T.R.V.S.)
○	SW409	40T55656W06 Tact, CP. SKQMAJ001 (MUTE/BLACK OUT)
△	SW409	40T55656W06 Tact, CP. SKQMAJ001 (MUTE)
	SW410	40T55656W06 Tact, CP. SKQMAJ001 (AF)
	SW411	40T55656W06 Tact, CP. SKQMAJ001 (T.INFO)
	SW412	40T55656W06 Tact, CP. SKQMAJ001 (DISP/TITLE)
	SW413	40T55656W06 Tact, CP. SKQMAJ001 (F/DEMO)
	SW414	40T55656W06 Tact, CP. SKQMAJ001 (R.TEXT/1/7)
	SW415	40T55656W06 Tact, CP. SKQMAJ001 (PTY/2/8)
	SW416	40T55656W06 Tact, CP. SKQMAJ001 (P. PTY/3/9)
	SW417	40T55656W06 Tact, CP. SKQMAJ001 (M.I.X./4/10)
	SW418	40T55656W06 Tact, CP. SKQMAJ001 (RPT/5/11)
	SW419	40T55656W06 Tact, CP. SKQMAJ001 (SCAN/6/12)
	SW420	40T55656W06 Tact, CP. SKQMAJ001 (EJECT)
Capacitors		
	C401	08S65128F76 CP., 0.1μF
	C402	08S65128F65 CP., 4700pF
	C403	08S65128F69 CP., 0.01μF
	C404	08S82122F57 CP., 680pF
	C405	08T15399W03 CP., 0.047μF
	C406	08T15399W03 CP., 0.047μF
	C407	08T15399W03 CP., 0.047μF
	E401	23S55311W42 CP. TAN., 4.7μF / 20V
Resistors		(All resistors are chip 1/10W±5% unless otherwise noted.)
	R411	06S95434W70 750 ohm 1/4W
	R412	06S95434W70 750 ohm 1/4W
	R414	06S45674W57 1K ohm 1/16W
	R415	06S45674W57 1K ohm 1/16W
	R416	06S45674W57 1K ohm 1/16W
	R417	06S45674W57 1K ohm 1/16W
	R418	06S45674W57 1K ohm 1/16W
	R419	06S95432W77 4.7K ohm
	R420	06S95434W37 33 ohm 1/4W
	R421	06S95434W37 33 ohm 1/4W
	R424	06S95433W01 43K ohm
	R429	06S45674W57 1K ohm 1/16W
○	R430	06S95434W28 13 ohm 1/4W
△	R430	06S95434W30 16 ohm 1/4W
○	R432	06S95434W34 24 ohm 1/4W
△	R432	06S95434W35 27 ohm 1/4W
○	R434	06S95434W35 27 ohm 1/4W
△	R434	06S95434W36 30 ohm 1/4W
○	R435	06S95434W35 27 ohm 1/4W
△	R435	06S95434W36 30 ohm 1/4W
○	R438	06S95434W35 27 ohm 1/4W
△	R438	06S95434W36 30 ohm 1/4W
	R440	06S95432W85 10K ohm
	R441	06S95432W85 10K ohm
	R442	06S95432W85 10K ohm
	R443	06S95432W61 1K ohm
	R444	06S95432W85 10K ohm
	R445	06S95432W61 1K ohm
	R446	06S95433W18 220K ohm
	R447	06S95432W85 10K ohm
	R448	06S95433W18 220K ohm

NOTE : ○ : For CDA-7944R Model Only, △ : For CDA-7842R Model Only, Others : Common.

Symbol No.	Part No.	Description
	R449	06S95432W85	10K ohm
	R450	06S95434W37	33 ohm 1/4W
	R451	06S95434W37	33 ohm 1/4W
○	R452	06S95434W28	13 ohm 1/4W
△	R452	06S95434W30	16 ohm 1/4W
	R454	06S95434W83	2.7K ohm 1/4W
	R455	06S95432W69	2.2K ohm
	R456	06S95432W61	1K ohm
	R458	06S95432W61	1K ohm

DC / DC Converter P.W.Board

IC's

IC901	51T80251F01	NJM78L09A
IC902	51T80252F01	NJM79L09A

Transistors

Q901	48T69176F02	2SC3421
Q902	48T55057W01	2SD1857
Q903	48T55057W01	2SD1857

Diodes

D901	48T55247W01	11EQS04
D902	48T55247W01	11EQS04
D903	48T55247W01	11EQS04
D904	48T55247W01	11EQS04
ZD901	48T83128F26	Zener, HZS9C2L

Coil

L901	24T95399W21	Inductor, 470μH

Transformer

T901	25T95401W01	LC-10

Capacitors

	C902	08T55390W22	TF, 0.027μF
○	E901	23T00134L29	ELY., 33μF / 16V
△	E901	23T45365W06	ELY., 33μF / 35V
○	E902	23T00134L15	ELY., 33μF / 10V
△	E902	23T45365W06	ELY., 33μF / 35V
	E903	23T45365W02	ELY., 100μF / 10V
○	E904	23T00134L32	ELY., 100μF / 16V
△	E904	23T45365W05	ELY., 100μF / 25V
○	E905	23T00134L32	ELY., 100μF / 16V
△	E905	23T45365W05	ELY., 100μF / 25V
	E906	23T45365W04	ELY., 47μF / 25V
	E907	23T45365W04	ELY., 47μF / 25V

D-OUT P.W.Board (○)

Capacitor

C120	08T15399W04	CP, 0.027μF

Resistor

R120	06S95434W95	CP., 8.2K ohm 1/4W

DP-Main P.W.Board

IC's

IC1101	51T75549W02	TC9296AF
IC1102	51T75548W01	TA2066F
IC1103	51T85408W01	BA6791FP
IC1104	51T16025W01	NJM2100M
IC1201	51T16025W01	NJM2100M
IC1202	51T11054W02	NJM78L05UA
IC1501	51T55288W02	LB1638M

Transistors

Q1101	48T80611F01	CP., 2SB1132
Q1102	48T80611F01	CP., 2SB1132

Diode

D1501	48T81063F01	CP., MA159

NOTE : ○ : For CDA-7944R Model Only, △ : For CDA-7842R Model Only, Others : Common.

Symbol No.	Part No.	Description
Crystal		
XL1101	91T95099W92	CP., 16.934MHz
Capacitors		
C1101	08S35374W01	CP., 0.1µF
C1102	08S45677W36	CP., 100pF
C1103	08S65128F71	CP., 0.015µF
C1104	08S65128F69	CP., 0.01µF
C1105	08S65128F69	CP., 0.01µF
C1106	08S65128F69	CP., 0.01µF
C1107	08T15399W02	CP., 0.033µF
C1108	08S35374W01	CP., 0.1µF
C1109	08S65128F71	CP., 0.015µF
C1111	08T15399W01	CP., 0.022µF
C1112	08T15399W01	CP., 0.022µF
C1113	08S35374W01	CP., 0.1µF
C1114	08S35374W01	CP., 0.1µF
C1115	08S45677W16	CP., 15pF
C1116	08S45677W18	CP., 18pF
C1118	08S65128F69	CP., 0.01µF
C1119	08S65128F79	CP., 0.027µF
C1120	08S65128F71	CP., 0.015µF
C1121	08S35374W01	CP., 0.1µF
C1122	08T65289W03	CP., 1µF
C1124	08S45677W14	CP., 12pF
C1125	08S45677W05	CP., 3pF
C1127	08S65128F65	CP., 4700pF
C1128	08S65128F63	CP., 3300pF
C1131	08T15399W03	CP., 0.047µF
C1132	08S45676W62	CP., 1200pF
C1133	08S35374W01	CP., 0.1µF
C1134	08S65128F79	CP., 0.027µF
C1135	08S65128F62	CP., 2700pF
C1136	08T55487W02	CP., 0.22µF
C1138	08S35374W01	CP., 0.1µF
C1140	08S35374W01	CP., 0.1µF
C1205	08S45677W32	CP., 68pF
C1206	08S45677W32	CP., 68pF
C1207	08S45677W32	CP., 68pF
C1208	08S45677W32	CP., 68pF
C1209	08S45677W32	CP., 68pF
C1210	08S45677W32	CP., 68pF
C1212	08S45677W32	CP., 68pF
C1213	08S45677W32	CP., 68pF
C1215	08S65128F79	CP., 0.027µF
C1216	08S82122F61	CP., 1000pF

Symbol No.	Part No.	Description
C1217	08S82122F61	CP., 1000pF
C1501	08S65128F79	CP., 0.027µF
E1101	23S55311W42	CP. TAN., 4.7µF / 20V
E1102	23S55311W23	CP. TAN., 10µF / 10V
E1103	23S55311W42	CP. TAN., 4.7µF / 20V
E1104	23S55311W23	CP. TAN., 10µF / 10V
E1105	23S55311W42	CP. TAN., 4.7µF / 20V
E1106	23T85373W03	CP. ELY., 47µF / 5.5V
E1108	23S55311W23	CP. TAN., 10µF / 10V
E1109	23T85373W05	CP. ELY.., 10µF / 16V
E1110	23T85373W05	CP. ELY., 10µF / 16V
E1202	23T85373W03	CP. ELY., 47µF / 5.5V
E1204	23T85373W05	CP. ELY., 10µF / 16V
E1205	23T85373W03	CP. ELY., 47µF / 5.5V
E1206	23T85373W05	CP. ELY., 10µF / 16V
E1207	23T85373W05	CP. ELY., 10µF / 16V
E1501	23T85373W05	CP. ELY., 10µF / 16V
Resistors		(All resistors are chip 1/16W±5% unless otherwise noted.)
R1101	06S45674W57	1K ohm
R1102	06S45674W81	10K ohm
R1103	06S45674W97	47K ohm
R1104	06S45675W06	100K ohm
R1105	06S45675W34	2.2M ohm
R1106	06S45674W93	33K ohm
R1108	06S64995F77	10K ohm 1/10W
R1109	06S45674W81	10K ohm
R1110	06S45674W57	1K ohm
R1111	06S45674W57	1K ohm
R1112	06S45674W65	2.2K ohm
R1113	06S70072F22	51 ohm 1/4W
R1114	06S70072F22	51 ohm 1/4W
R1115	06S45674W85	15K ohm
R1116	06S45674W81	10K ohm
R1117	06S45674W73	4.7K ohm
R1119	06S45674W88	20K ohm
R1121	06S45674W88	20K ohm
R1123	06S45674W91	27K ohm
R1124	06S45674W57	1K ohm
R1125	06S45674W33	100 ohm
R1126	06S45674W33	100 ohm
R1127	06S45674W54	750 ohm
R1128	06S45674W54	750 ohm
R1130	06S45674W97	47K ohm
R1131	06S45674W57	1K ohm
R1133	06S45674W49	470 ohm
R1135	06S45674W65	2.2K ohm

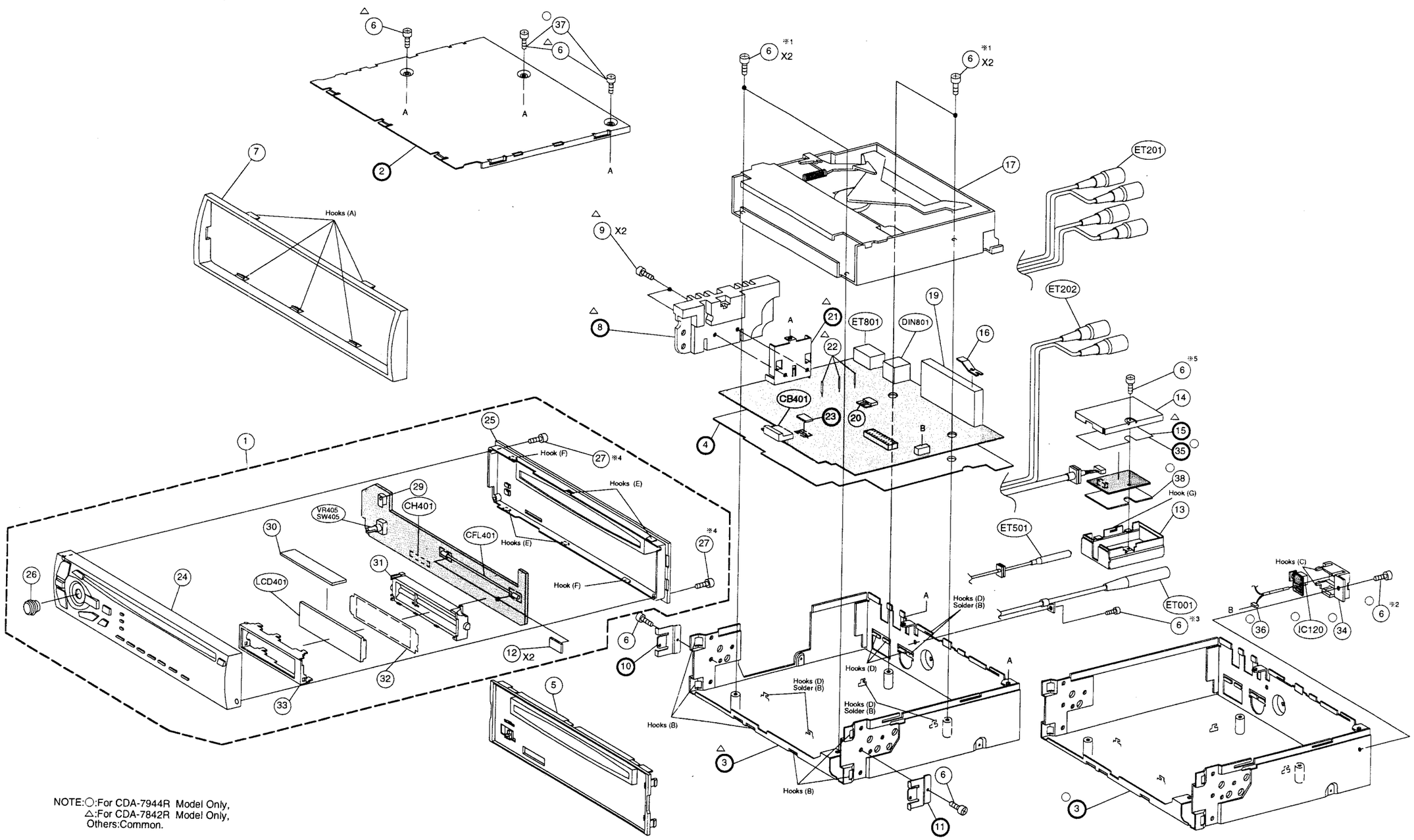
Symbol No.	Part No.	Description
R1136	06S45674W77	6.8K ohm
R1137	06S45674W81	10K ohm
R1138	06S45674W95	39K ohm
R1140	06S45674W87	18K ohm
R1141	06S45674W81	10K ohm
R1143	06S45674W77	6.8K ohm
R1145	06S45674W92	30K ohm
R1147	06S45674W54	750 ohm
R1150	06S64995F77	10K ohm 1/10W
R1151	06S45675W04	82K ohm
R1160	06S45674W54	750 ohm
R1205	06S45674W25	47 ohm
R1206	06S45674W25	47 ohm
R1207	06S45674W95	39K ohm
R1208	06S45674W95	39K ohm
R1209	06S45674W90	24K ohm
R1210	06S45674W90	24K ohm
R1211	06S45674W95	39K ohm
R1212	06S45674W95	39K ohm
R1213	06S45674W90	24K ohm
R1214	06S45674W90	24K ohm
R1215	06S45674W90	24K ohm
R1216	06S45674W90	24K ohm
R1217	06S45674W90	24K ohm
R1218	06S45674W90	24K ohm
R1219	06S45674W73	4.7K ohm
R1220	06S45674W73	4.7K ohm
R1221	06S45674W73	4.7K ohm
R1222	06S45674W73	4.7K ohm
Miscellaneous		
CB401	09T15299Y15	15P Connector
CFL401	65T25014Y02	FL Tube
CH401	09T15298Y15	15P Connector
DIN801	09T55071W11	Ai-NET Connector
ET001	01T15513W23	Assy., Antenna Receptacle
ET201	01T85236W08	Assy., RCA Connector (FRONT OUT / REAR OUT)
ET202	01T15610Y01	Assy., RCA Connector (SUB-W) & Wire
ET501	01T75188W17	Assy., Remote Control Interface Connector
○ ET801	09T55175W16	Power Supply Connector
△ ET801	09T55175W16	Speaker Output & Power Supply Connector
HD1201	81B81296W02	Pick - Up Unit, EP21A020

Symbol No.	Part No.	Description
○ IC120	51T75111W01	IC, TOTX193 (Optical D-OUT)
○ LCD401	65T15625Y02	LCD Display
△ LCD401	65T15625Y01	LCD Display
M1301	01V73300W33	Assy., Motor - Load (7V - 370mA)
M1302	01V73300W35	Assy., Motor Spindle (2V-90mA)
M1303	01V73300W38	Assy., Motor Sled (7V - 370mA)
SW1301	40T25956W02	Switch, Detector (DISC CHUCKING POSITION)
SW1302	40T25956W02	Switch, Detector (DISC LOAD)
SW1303	40T25956W01	Switch, Detector (DISC LOAD)
SW1304	40T25956W02	Switch, Detector (DISC END)
SW1305	40T71025F03	Switch, Detector (LIMIT)
VR405	40T45670W05	Rotary Encoder Volume
SW405		(VOLUME / MODE • BBE)

NOTE : ○ : For CDA-7944R Model Only, △ : For CDA-7842R Model Only, Others : Common.

Exploded View (Cabinet)

NOTE : The screws marked "※1~5" are disassembly parts.



NOTE:○:For CDA-7944R Model Only,
△:For CDA-7842R Model Only,
Others:Common.

Disassembly Instructions

1. Removal of Nose Unit

(1) Refer to the Owner's Manual (Part No. 68P10924Y41).

2. Removal of Face Plate

(1) Remove five Hooks (A), and remove Face Plate. ..... Hooks (A) (2-B)

3. Removal of Front Escutcheon

(1) After removal of Top Cover, Face Plate and two Bracket Side, ... Hooks (B) (4-D, 4-E)
remove six Hooks (B).

4. Removal of CD Deck Mechanism (○)

(1) After removal of Front Escutcheon, remove four screws No.6. ..... Screws No. 6 (※1) (1-E, 1-F)

(2) Remove CD Deck Mechanism slowly, disconnect D-OUT Wire ..... D-OUT Wire No. 36 (4-G)
No. 36 to Main P.W. Board.
NOTE : There is D-OUT Wire out of sight between CD Deck Mechanism and Main P.W.Board. Do not cut D-OUT Wire.

(3) Remove two points of Solder (A) as shown in Figure 8, and remove D-OUT Wire.

5. Removal of CD Deck Mechanism (△)

(1) After removal of Front Escutcheon, remove four screws No. 6. ..... Screws No. 6 (※1) (1-E, 1-F)

(2) Disconnect a connector from Main P.W.Board.

6. Removal of D-OUT P.W.Board (○)

(1) After removal of CD Deck Mechanism, remove a screw No. 6, ... Screw No. 6 (※2) (4-G)
and two Hooks (C). Hooks (C) (4-G)

(2) D-OUT P.W.Board with D-OUT Cover can be removed completely.

7. Removal of Main P.W. Board

(1) After removal of CD Deck Mechanism, remove a screw No. 6. ..... Screw No. 6 (※3) (4-G)

(2) Remove six points of Solder (B) and nine Hooks (D). ..... Solder (B) (4-E, 4-F)
Hooks (D) (4-E, 4-F)

8. Removal of Front P.W. Board

(1) After removal of Nose Unit, remove two screws No. 27. ..... Screws No. 27 (※4) (3-D, 4-D)

(2) Remove Knob Rotary No. 26. ..... Knob Rotary No. 26 (4-A)

(3) Remove four Hooks (E), and remove Nosepiece. ..... Hooks (E) (3-D, 4-C)

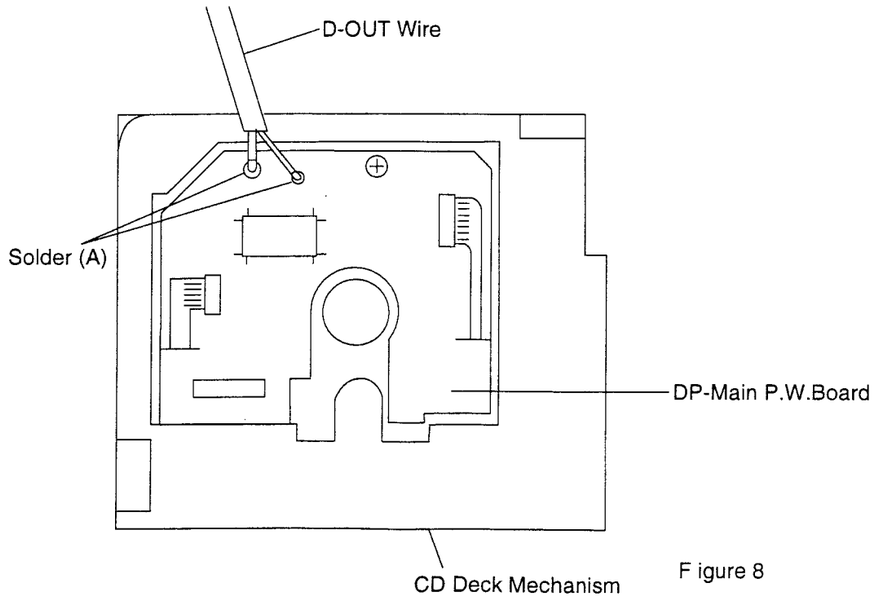
(4) Remove two Hooks (F), and remove Front P.W.Board. ..... Hooks (F) (3-D, 4-D)

9. Removal of DC/DC Converter P.W. Board

(1) Remove a screw No. 6 , and remove Cover DC-DC No. 14. ..... Screw No. 6 (※5) (3-G)
Cover DC-DC No. 14 (3-G)

(2) Remove a Hook (G), and disconnect a connector from Main P.W.Board. ..... Hook (G) (3-G)

NOTE: For the screws No., Hook and Solder, refer to the Exploded View (Cabinet).
○ : For CDA-7944R Model Only, △ : For CDA-7842R Model Only, Others : Common.



F igure 8

CDA-7944R/ CDA-7842R

Cabinet Assembly Parts List

NOTE:Parts without part number are not supplied.

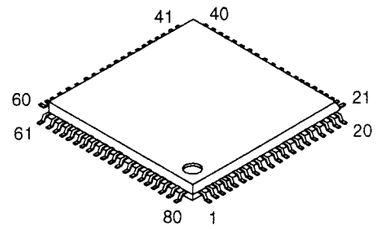
Symbol No.	Index	Part No.	Description
○ 1	3-B	01V14300Y77	Assy., Nose Unit
△ 1	3-B	01V14300Y80	Assy., Nose Unit
5	4-D	13C10783Y01	Assy., Front Escutcheon
6		03S44205G29	Screw, Pan (M2.6X6)
7	2-B	33C10618Y01	Face, Plate
△ 9	2-D	03S38013W05	Screw, Pan (M2.6X16)
12	4-C	14S11351Y16	Insulator, Cover
13	3-G	15C11509Y01	Case, DC-DC
14	3-G	15B11508Y01	Cover, DC-DC
16	3-F	41A11113Y01	Spring, T/G
17	2-F	81D10094Y01	CD Deck Mechanism, DP23L05A
19	2-E	77C10163Y01	FM/MW/LW Tuner Unit, MB4R603S (FE001)
20	3-E	36A70327W01	Knob, Slide
△ 22	3-E	09T84840F02	Lug, Style 32mm
○ 24	4-B	13T15458Y05	Assy., Nosepiece
△ 24	4-B	13T15458Y04	Assy., Nosepiece
○ 25	3-C	13D10486Y02	Nose, Bottom
△ 25	3-C	13D10486Y01	Nose, Bottom
○ 26	4-A	36B10628Y05	Knob, Rotary
△ 26	4-A	36B10628Y01	Knob, Rotary
27		03S68555F39	Screw, Pan (M1.7X10)
29	3-C	07A90454W01	Bracket, Remote
30	4-B	75T85248W09	Rubber, Electric
31	4-C	15B10915Y01	Cover, LCD
32	4-C	26A10916Y01	Reflector, Sheet
33	4-B	15C10914Y01	Case, LCD
○ 34	4-G	15B71937W01	Cover, Connector D-OUT
○ 36	4-G	01T75451W02	Assy., Wire D-OUT
○ 37	1-D	03S38013W51	Screw, Pan (M2.6X6)
○ 38	3-G	14A20122Y02	Insulator, DC-DC

NOTE : ○ : For CDA-7944R Model Only, △ : For CDA-7842R Model Only, Others : Common.

Semi-Conductor Lead Identifications

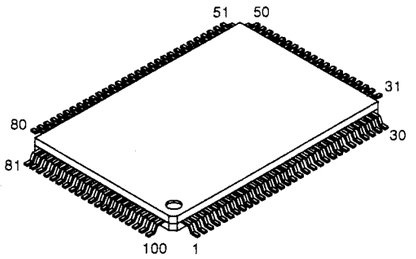
NOTE : For the parts not mentioned, refer to the Schematic Diagram.

85312W84 : IC501



PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O
1	Black-Out SEL	I	22	SW-CLK	O	43	MUTE	O	63	ACC DET	I
2	ENCODER1	I	23	L-CONT	O	44	NC	—	64	BUS-IN	I
3	ENCODER2	I	24	NC	—	45	DTS MUTE	I	65	SW-1	I
4	AV_{SS}	—	25	LOAD FWD	O	46	BUZZER	O	66	BUS-OUT	O
5	BBE Low CONT	O	26	LOAD BWD	O	47	NC	—	67	SW-2	I
6	BBE Hi CONT	O	27	NC	—	48	NC	—	68	V_{DD}	—
7	AV_{REF}	—	28	NC	—	49	NC	—	69	X2	—
8	DTS STS	I	29	NC	—	50	NC	—	70	X1	—
9	DTS CMD	O	30	SW-3	I	51	DTS STBY	O	71	GND	—
10	DTS CLK	O	31	SW-4	I	52	NC	—	72	NC	—
11	LCD DO	I	32	V-CONT	O	53	CFL+B ON	O	73	GND	—
12	LCD DI	O	33	GND	—	54	NOSE POWER	O	74	AV_{DD}	—
13	LCD CLK	O	34	LIMIT-SW	I	55	POWER ON	O	75	V_{DD}	—
14	LCD CE	O	35	LSI-RST	O	56	○ NC	—	76	Dig-Out SEL	I
15	$\overline{\text{LCD RST}}$	O	36	BUS-0	I/O		△ POWER IC	O	77	INTLZ	I
16	E.VOL DATA	I/O	37	BUS-1	I/O	57	NC	—	78	SUB-W SEL	I
17	E.VOL CLK	O	38	BUS-2	I/O	58	$\overline{\text{IN DIMMER}}$	I	79	T-SENS	I
18	CD CE	O	39	BUS-3	I/O	59	IN INT	I	80	NOSE ON	I
19	CD CLK	O	40	BUCK	O	60	$\overline{\text{RESET}}$	I			
20	CD DATA	O	41	CCE	O	61	REMOCON	I			
21	SW-DATA	O	42	LOCK	I	62	BAT DET	I			

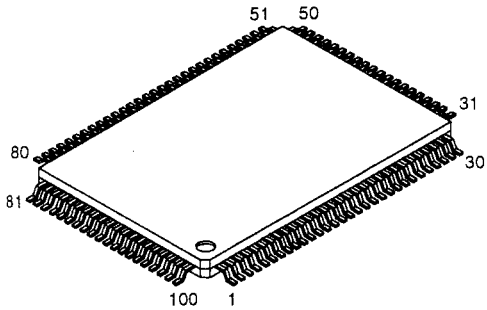
85089W19 : IC502

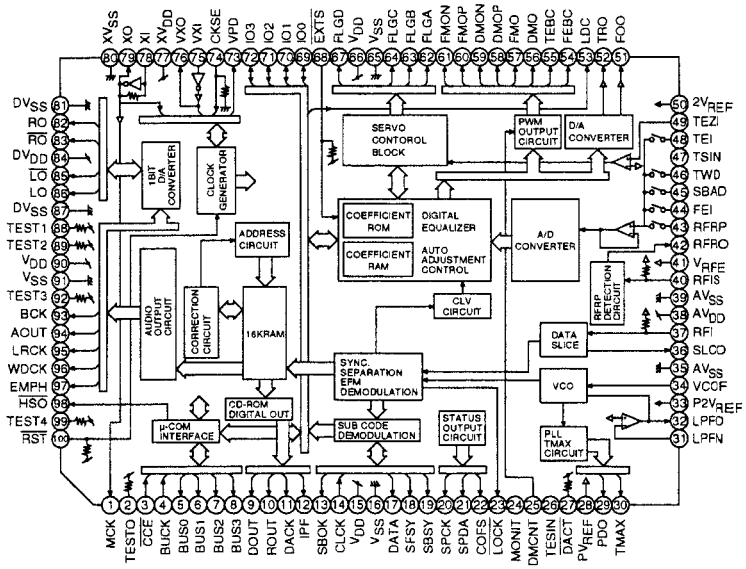


PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O
1	V_{CC}	—	26	NC	—	51	NC	—	76	SEEK Req.	O
2	NC	—	27	NC	—	52	NC	—	77	RDS RESET	O
3	X0A	—	28	NC	—	53	TUNER CLK	I	78	SD	I
4	MOD0	—	29	NC	—	54	TUNER SI	I	79	$\overline{\text{PSWN}}$	I
5	MOD1	—	30	NC	—	55	TUNER SO	O	80	$\overline{\text{Auto Adj.}}$	I
6	X0	O	31	NC	—	56	RDS SDA	I/O	81	NC	—
7	X1	I	32	NC	—	57	RDS CLK	O	82	LO / $\overline{\text{DX}}$	O
8	V_{SS}	—	33	NC	—	58	GND	—	83	NC	—
9	$\overline{\text{RESET}}$	I	34	$\overline{\text{A-MUTE}}$	O	59	V_{SS}	—	84	AV_{SS}	—
10	NC	—	35	GND	—	60	GND	—	85	S / M	I
11	NC	—	36	GND	—	61	GND	—	86	M / P	I
12	NC	—	37	GND	—	62	GND	—	87	GND	—
13	NC	—	38	GND	—	63	E2P SDA	I/O	88	GND	—
14	NC	—	39	NC	—	64	E2P CLK	O	89	GND	—
15	NC	—	40	NC	—	65	NC	—	90	GND	—
16	NC	—	41	NC	—	66	NC	—	91	GND	—
17	NC	—	42	NC	—	67	$\overline{\text{SEEK Req.}}$	O	92	GND	—
18	NC	—	43	NC	—	68	GND	—	93	AV_{CC}	—
19	NC	—	44	NC	—	69	$\overline{\text{AF HOLD}}$	O	94	AVR	—
20	NC	—	45	R_XD	I	70	NC	—	95	NC	—
21	NC	—	46	T_XD	O	71	IF MUTE	O	96	NC	—
22	NC	—	47	NC	—	72	FM / $\overline{\text{AM}}$	O	97	TUNER STBY	I
23	$\overline{\text{AM ST}}$	I	48	NC	—	73	PLL CLK	O	98	NC	—
24	NC	—	49	NC	—	74	PLL DATA	I/O	99	DAVN	I
25	NC	—	50	V_{CC}	—	75	PLL CE	O	100	NC	—

NOTE : ○ : For CDA-7944R Model Only, △ : For CDA-7842R Model Only, Others : Common.

TC9296AF: IC1101 (DP23L05A)





ALPINE

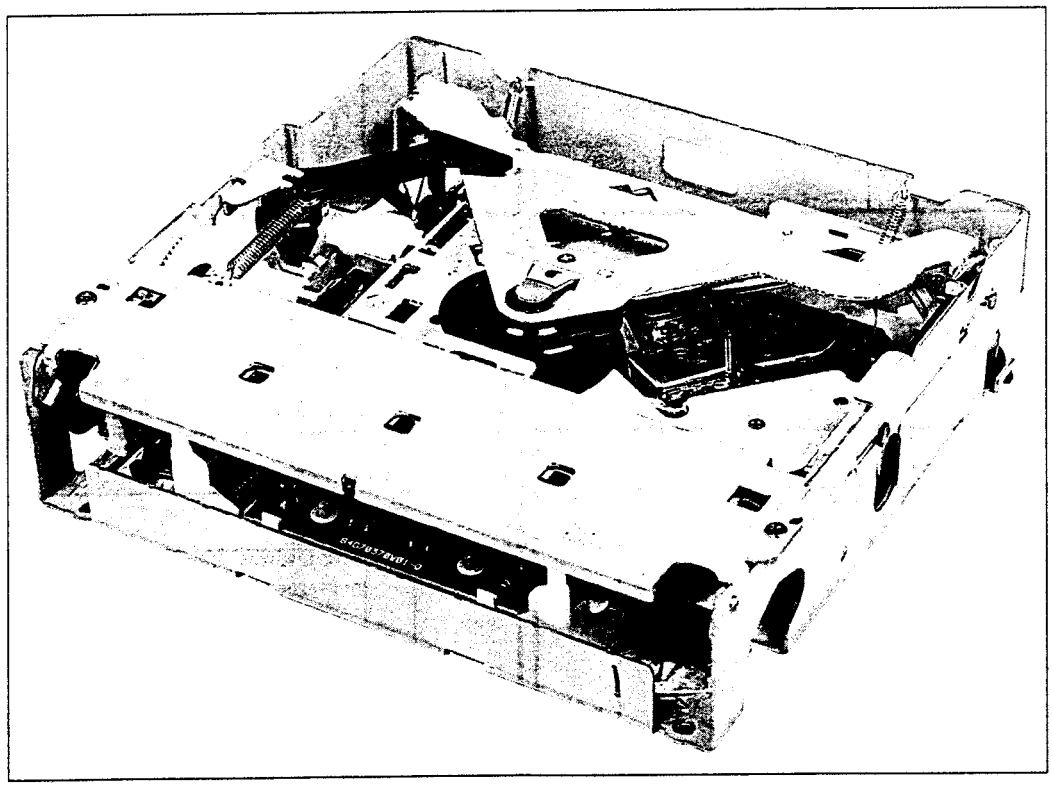
SERVICE MANUAL

CD Player Mechanism

V19009

ADDENDUM & REVISED

- This manual is described on DP23L010 only. The DP23L010 is developed from DP24L010. For information that is not mentioned in this service manual, refer to the Service Manual • DP-L SERIES (68E23246S01).- V130.03
- 当マニュアルはDP23L010についてのみ記載しております。又、DP24L010がベースモデルとなっておりますので、相違部分のみ記載しております。詳細についてはDP-L SERIES (68E23246S01)を参照願います。



DP-L SERIES

Contents

CD Mechanism Cabinet Assembly Parts List (Only Difference) 2
Exploded View (CD Mechanism) ..... 3 to 4

Mechanism Function Description
Component Disassembly and Assembly Notes
] Refer to the Service Manual for DP-L Series (Part No. 68E23246S01).

CD Mechanism Assembly Parts List

NOTE: For the parts not mentioned, refer to the Service Manual for DP-L SERIES (Part No.68E23246S01).

Symbol No.	Index	Part No.	Description
61	2-G	03S38013W25	Screw, Pan (M2X4)

Symbol No.	Index	Part No.	Description
Miscellaneous			
HD1201		81B81296W01	Pick-Up Unit
M1302		01V94200W03	Assy., Spindle Motor (3V-90mA)

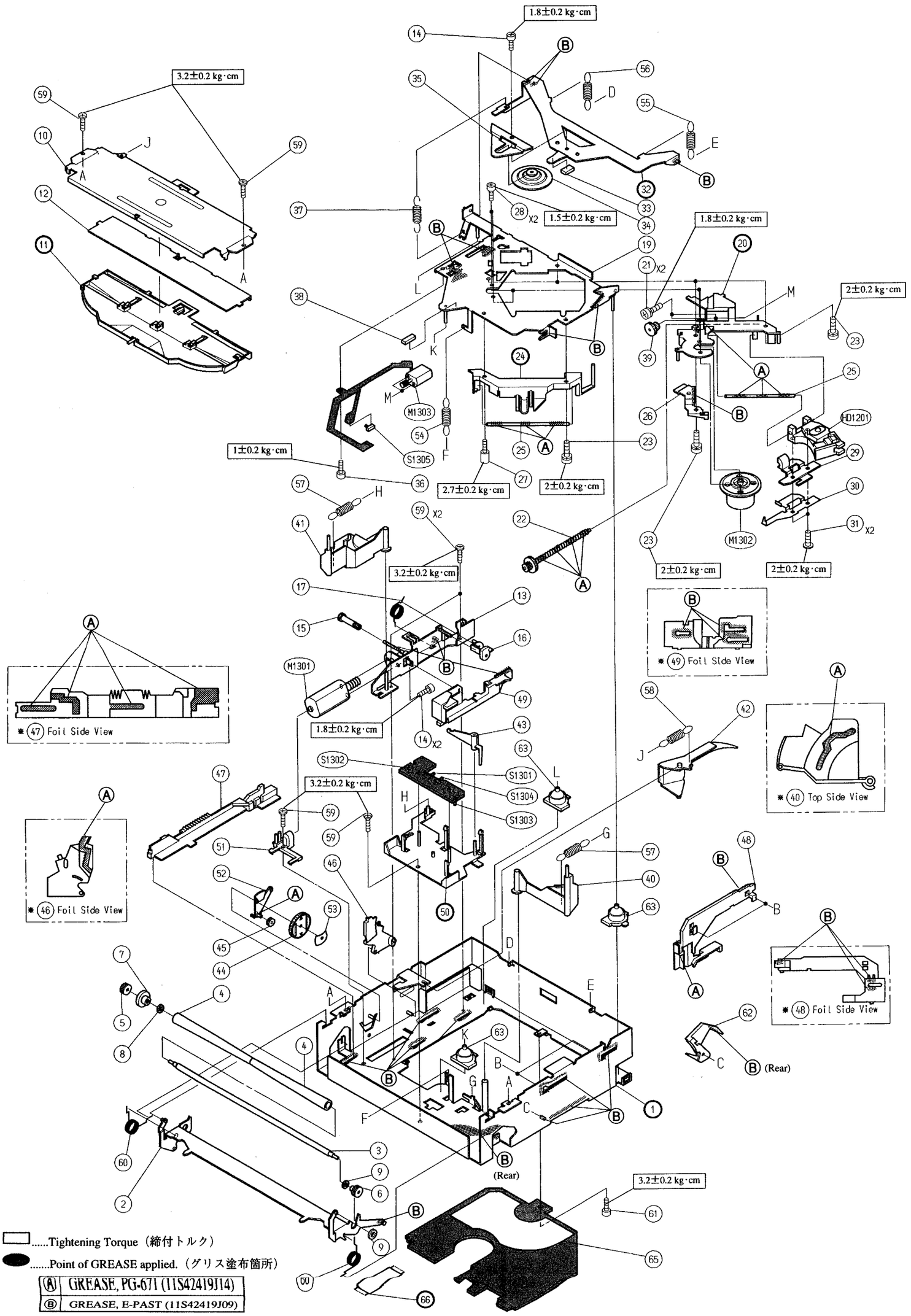
CDメカニズム関係部品表

※ 記載されていない部品については、サービスマニュアル・DP-L SERIES (68E23246S01) を参照願います。

記号	索引	部品番号	部品名	標準卸価格
61	2-G	03S38013W25	Screw, Pan (M2X4)	45

記号	索引	部品番号	部品名	標準卸価格
その他の電気部品				
HD1201		81B81296W01	Pick-Up Unit	—
M1302		01V94200W03	Assy., Spindle Motor (3V-90mA)	1,530

Exploded View (CD Mechanism)

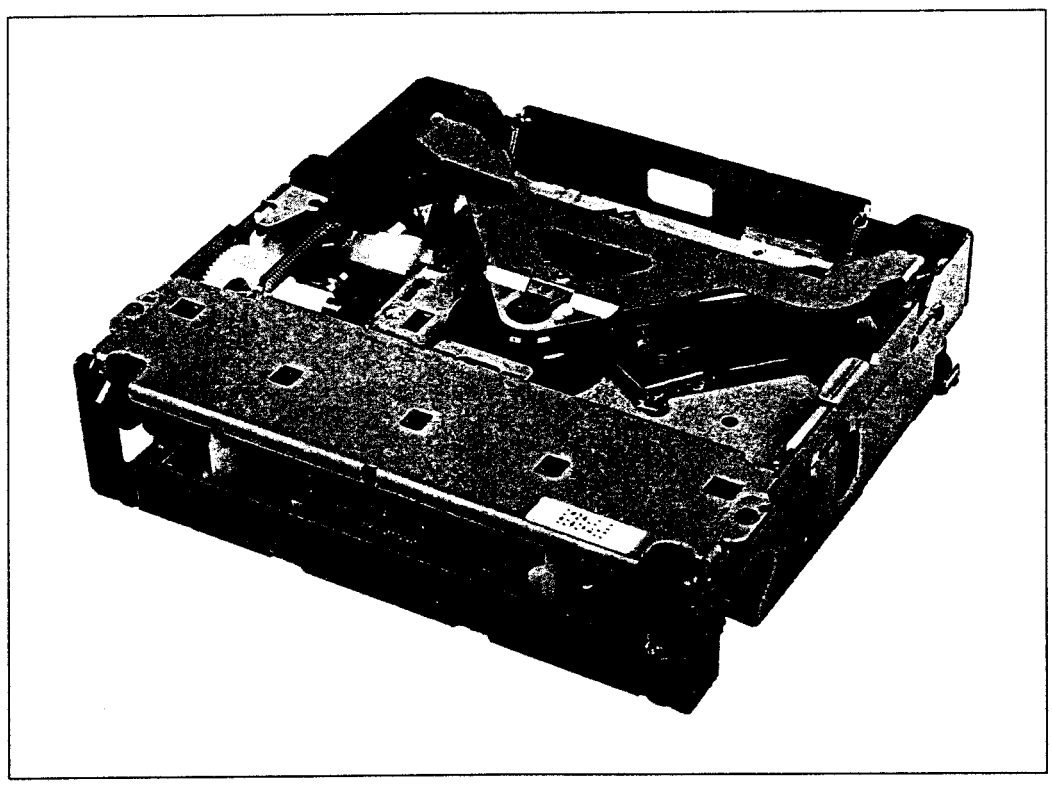


ALPINE

SERVICE MANUAL

CD Player Mechanism

V19008



DP-L SERIES

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Exploded View (Cassette Deck Mechanism) ..... 21 to 22
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Mechanism Function Description
メカの動作説明

<Outline of DP24L010 mechanism>
＜DP24L010メカ概要＞

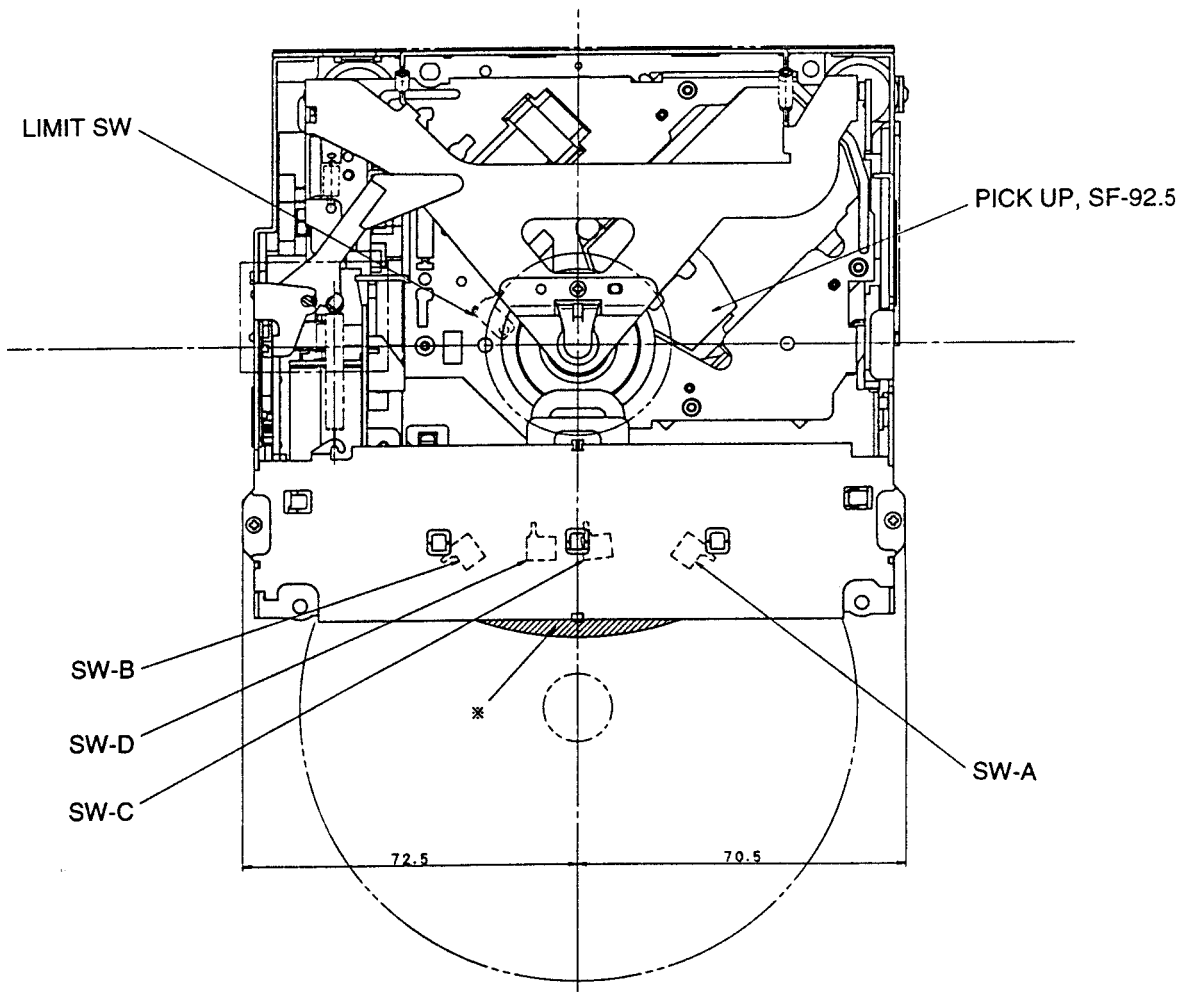
1. Mechanical specifications
The DP-L consists of one motor and 5 switches.
The mechanism allows a loading of 12 cm disc only and ejects 8 cm disc if it is detected.

1. 機構仕様
DP-Lは1 MOTOR/5 SWで構成されている。
また、本MECHは12cmDISCのみLOADINGを行い、8cmDISCを検出した場合には、排出を行う構成である。

2. Electrical specifications
With a digital LSI (servo processor) employed,
(1) Reliability is improved due to full automatic adjustments carried out:
- Disc variations are absorbed.
- Pickup temperature characteristics and deterioration are absorbed.
- Skillful works such as adjustments are eliminated.

2. 電気仕様
ディジタルサーボLSI（サーボプロセッサー）の採用により、
(1) 完全自動調整による信頼性の向上
- ディスクのバラツキを吸収できる
- ピックアップの温特、劣化を吸収できる
- 調整等の熟練を要する作業を必要としない

<DP24L010 Sensor switch location diagram>
＜DP24L010センサーSW配置図＞



<Function of DP24L010 sensor switches>

	I/O	Name	Function
1	I	SW-A	Detects disc insertion of 8 cm or 12 cm disc. Identifies 8 cm or 12 cm disc. Detects 12 cm disc is pulled out. Detects insertion position of 8 cm disc.
2	I	SW-B	Same as above
3	I	SW-C	Detects eject position of 12 cm disc. Identifies 8 cm or 12 cm disc. Detects reload of 12 cm disc.
4	I	SW-C	Detects completion of chucking operation. Detects disc is in chucking status.
5	I	Limit SW	Detects pickup is moved to inner most position.

＜DP24L010各センサーSWの働き＞

	I/O	名称	機能
1	I	SW-A	8cm/12cm DISCの挿入を検知する 8cm/12cm DISCの認識を行う 12cmDISCが引き抜かれたことを検知する 8cm DISC挿入位置を検知する
2	I	SW-B	同上
3	I	SW-C	12cm DISCのEJECT位置を検知する 8cm/12cm DISCの認識を行う 12cm DISCのRELOADを検知する
4	I	SW-D	チャッキング動作の終了を検知する DISCがチャッキング状態であることを検知する
5	I	Limit SW	ピックアップが内周へ移動したことを検知する

<Operation description>

＜動作説明＞

1. Loading

Of the switches SW-A and SW-B, the switch which detects L→H first is referred as a base switch. And then, if the system detects L→H at another switch (SW-A or SW-B) within 3 sec, the system outputs a signal to LOAD, FWD, and BWD, and rotates the motor in the loading direction.

After starting of the loading, SW-A or SW-B enters operation to detect of H→L. When the system detects L→H at SW-C while both SW-A and SW-B go L, the system understands the disc size is 12 cm and continues the loading. But, when it is not detected the system understands an 8 cm disc is loaded and enters the eject operation.

In case of 12 cm disc, the system detects H→L at SW-D and completes the loading operation.

Monitoring time for switches executing the timing chart is shown on the timing chart. If the system can not detect for that time, it assumes a loading error exists and executes the eject timing chart after waiting of 30ms.

1. Loading

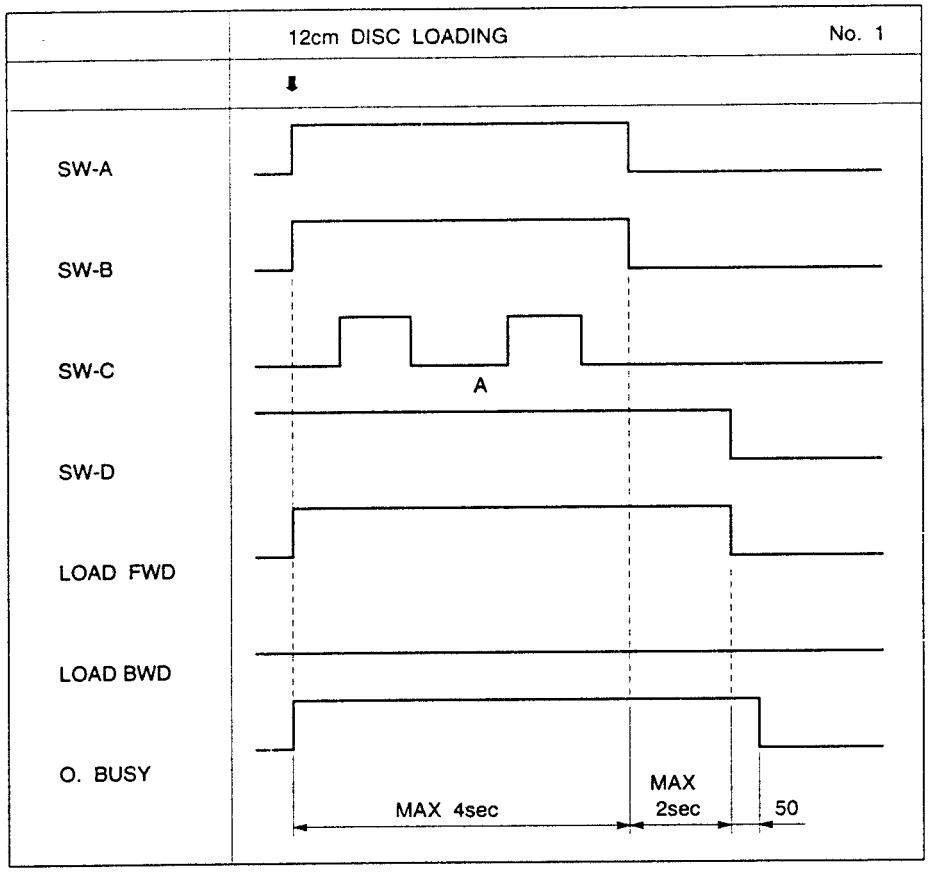
SW-AまたはSW-Bで、早くL→Hを検出したSWをベースのSWとする。その後、3sec以内に別のSW（SW-A or SW-B）がL→Hになったのを検出できれば、LOAD, FWD, BWDに信号を出しMOTORをLOADING方向へ回転させる。

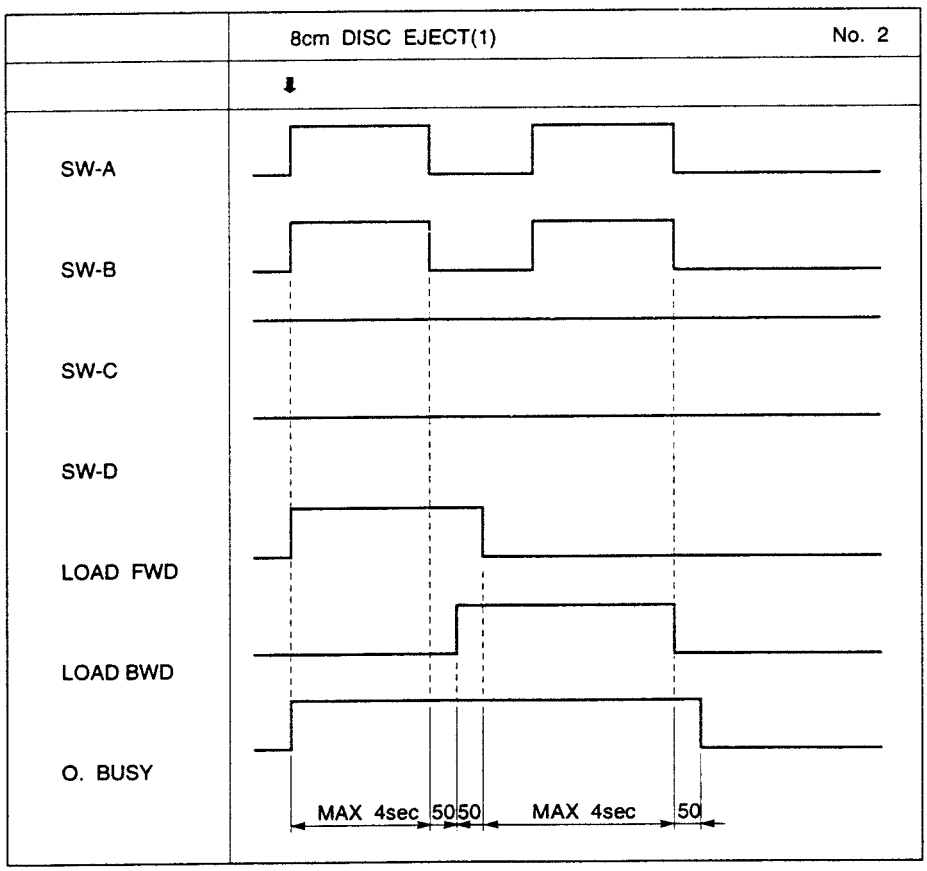
LOADING開始後、次はSW-AまたはSW-BのH→Lを検出に入る。SW-AおよびSW-Bがともに Lになる間にSW-CのL→Hが検出された場合には12cm DISCとしてLOADINGをそのまま実行するが、検出出来ない場合には、8cm DISCがLOADINGされたものとして排出処理に入る。

12cmの場合には、SW-DのH→Lを検出してLOADING完了とする。

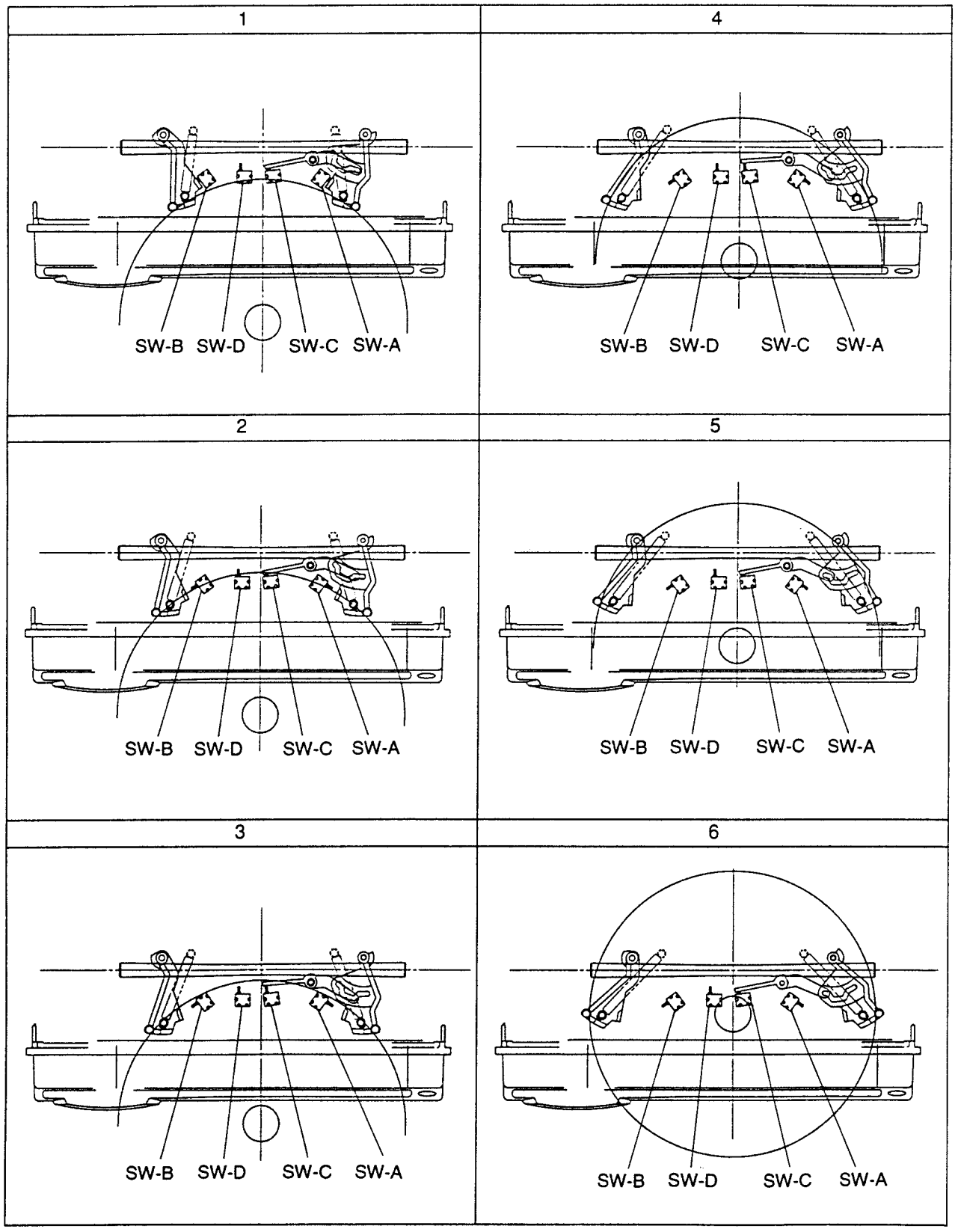
タイミングチャート実行時のSWの監視時間はタイミングチャート上に掲載してある通りとする。その時間に検出出来ない場合にはLOADING ERRORとし、300msのWAITを経た後、EJECTのタイミングチャートを実行する。

Timing chart
タイミングチャート





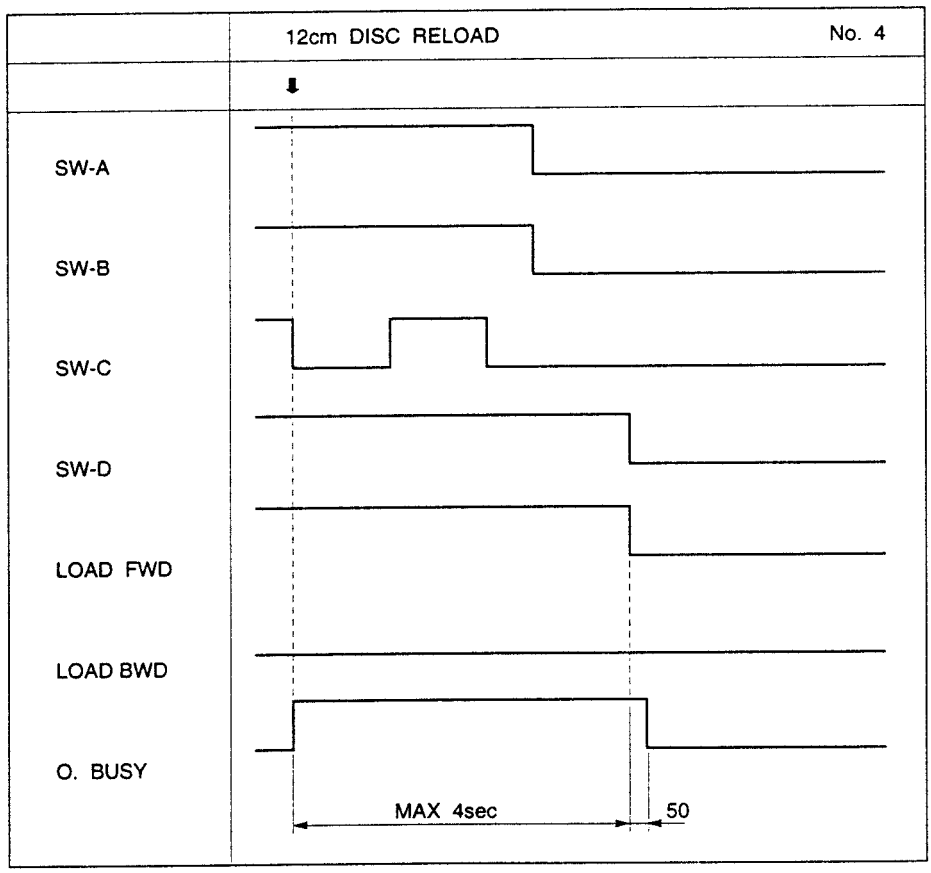
Switch operation in disc loading
ディスク・ローディング時における各スイッチの働き



2. Reload
After completion of the eject operation, a Reload condition occurs, and if SW-A and SW-B do not go "L" within 0.5 sec, the system executes No.4 timing chart to start the reloading. (If go "L", completes the eject.)
For other conditions, same as No.1.
※ Reload condition
SW-A and SW-B keep "H" for more than 0.5 sec.
(Disc is not removed after completion of the eject operation.)

2. RELOAD
EJECT完了後、RELOAD条件が発生し、且つ0.5sec以内にSW-AおよびSW-Bが“L”にならなかった場合には、No.4のタイミングチャートを実行しRELOADさせる。（なった場合にはEJECT完了とする）
他の条件に関しては、No.1と同様である。
※ RELOAD条件
SW-AおよびSW-BがHのまま0.5sec以上となった場合（EJECT完了後DISCを取らない状態）

Timing chart
タイミングチャート



3. Eject
The Eject process (by eject key) is not accepted for a mode other than mode shift period.

A 12 cm disc can be ejected by performing No.3 timing chart. That is, in terms of SW monitoring, L→H at SW-C is detected twice.

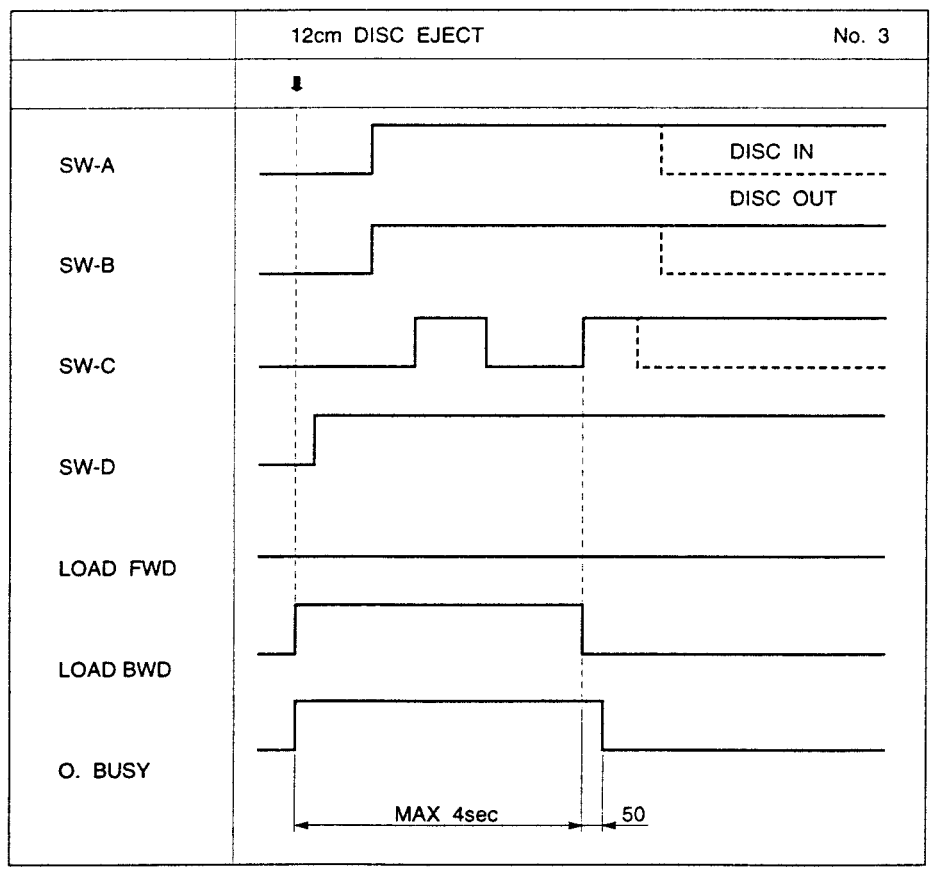
Eject from loading error mode
As disc size of 8 or 12 can be identified in the loading operation, the eject operation is carried out according to the identification.
In case of 8 cm disc:operations following B in No.2 are carried out, and 8 cm disc, No.3 operations are carried out.

3. EJECT
EJECT処理（EJECT KEYによるもの）は、MODE移行時以外は受け付けるものとする。

No.3のタイミングチャートを実行することにより、12cm DISCをEJECTすることが出来る。SWの監視としては、SW-CのL→Hを2回検出した場合である。

LOADING ERROR MODEからのEJECT
LOADING時に8cm/12cm DISCは判断出来るので、それに合わせたEJECT処理を行う。8cm DISCの場合は、No.2のB以降の処理を行い、12cm DISCの場合は、No.3の処理を行う。

Timing chart
タイミングチャート



4. Operations at ACC OFF
At ACC OFF, if the system is executing the timing chart, it completes the mode and then enters the standby mode.
However, if a DISC IN (disc is not removed) status is detected after completion of Eject, the system enters the standby mode after performing the loading to protect the disc. If a loading error occurs at that time, the system does not shift to the eject mode but shifts after the ACC ON.
Moreover, an OR operation is carried out for SW-A and SW-B and the result is fed to an interruption port. If it is "L"→"H", the system returns from the standby mode and carries out the loading operation.
After completion of the loading or determining the loading error, the system enters the standby mode again.

4. ACC OFF時の処理
ACC OFF時、タイミングチャート実行中であれば、そのMODEを完了してからSTAND BY MODEに入る。
但し、EJECT終了後DISC IN（抜き取られていない）の状態が検出されていたら、DISC保護のため、LOADINGを行ってからSTAND BY MODEに入る。その時LOADING ERRORが発生した場合には、EJECT MODEに以降せず、ACC ONを待って移行することとする。
また、ハードでSW-AとSW-BでORを取り、割り込みPORTに入力する。ACC OFF時にEJECT MODEであり、且つ割り込みPORTが“L”→“H”になった場合は、STAND BYから復帰しLOADING動作を行う。
LOADING完了またはLOADING ERROR確定後、再度STAND BY MODEに入ることとする。

5. Operations at ACC ON
At the ACC ON, previous mode is continued.

5. ACC ON時の処理
ACC ON時は前のMODEを継続することとする。

6. Return from eject error
When both SW-A and SW-B go "H"→"L" in Eject error mode, the system completes the eject operation by assuming the disc is removed.

6. EJECT ERRORよりの復帰
EJECT ERROR MODE時にSW-AおよびSW-Bがともに“H”→“L”になった場合には、DISCが引き抜かれたものとしてEJECT完了とする。

7. Emergency eject process
Eject key is not accepted in all modes. However, when ejecting in a mode other than chucking status (C mode), the system performs the loading operation once and then ejects as in initialization. (To prevent disc from popping out.)

7. 緊急EJECT処理
すべてのMODEにおいてEJECT KEYは受け付けるものとする。
但し、チャッキング状態（C MODE）以外からEJECTする場合には、イニシャライズ時と同じように、いったんLOADINGをしてからEJECTするものとする。（DISCの飛び出しを防ぐため）

8. BATT detection
When the BATT detection port detects BATT OFF, the system enters the standby mode under any conditions. After releasing the standby, the system checks status of the switches and performs initialization process if the status is other than the chucking status (C mode).

8. BATT検知
BATT検知のPORTがBATT OFFを検知したら、無条件にSTAND BY MODEに入る。
STAND BY解除後の処理としては、SWの状態を確認し、チャッキング状態（C MODE）以外の場合には、イニシャライズ処理を行うものとする。

9. Timing allowance
Basically ±10%.

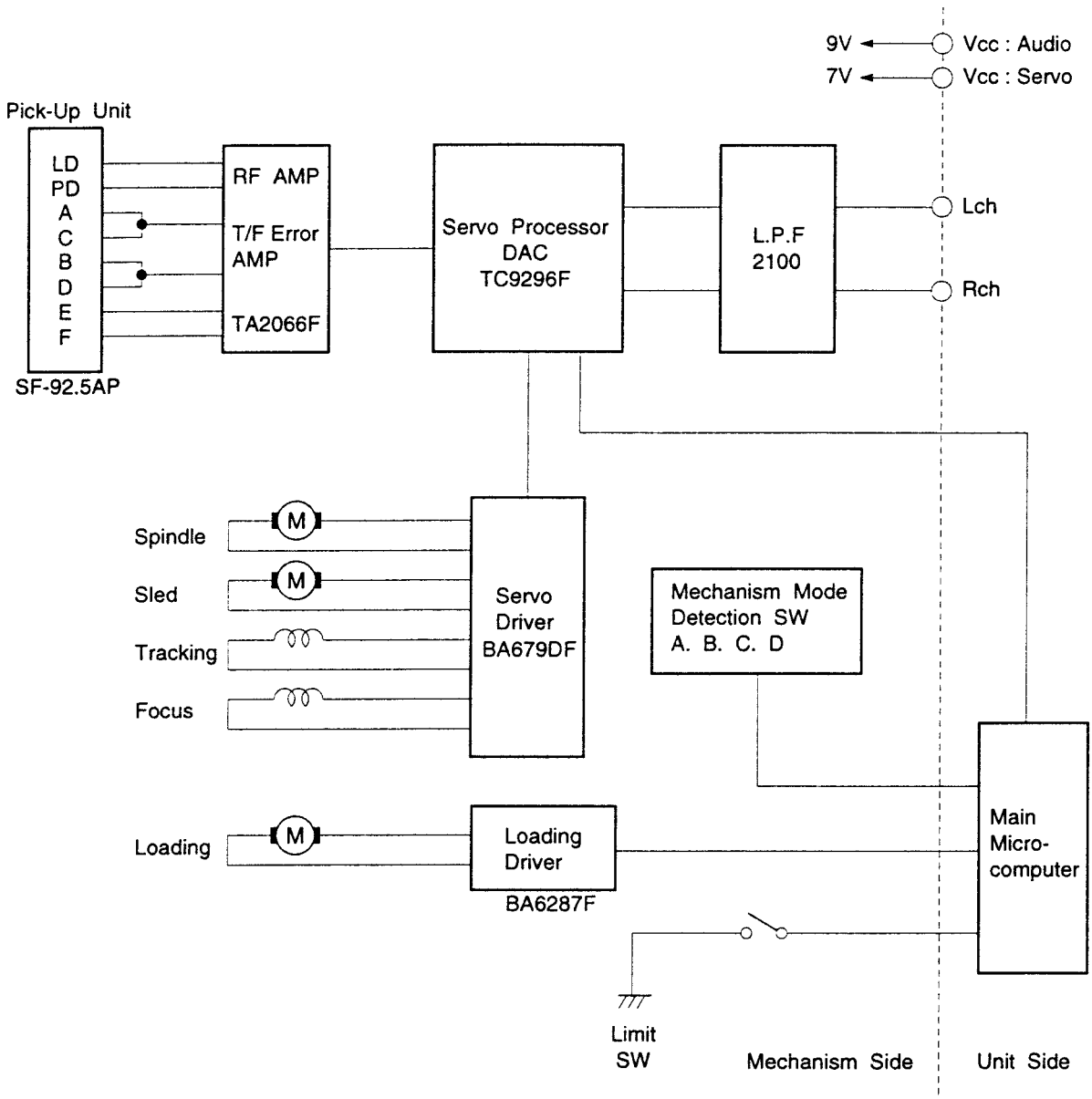
9. タイミングの公差について
±10%を基本とする。

10. Elimination of switch chattering
Performs for 8 ms and 2 time coincidence.

10. SWのチャタリング取り処理について
8msで行い、2度一致とする。

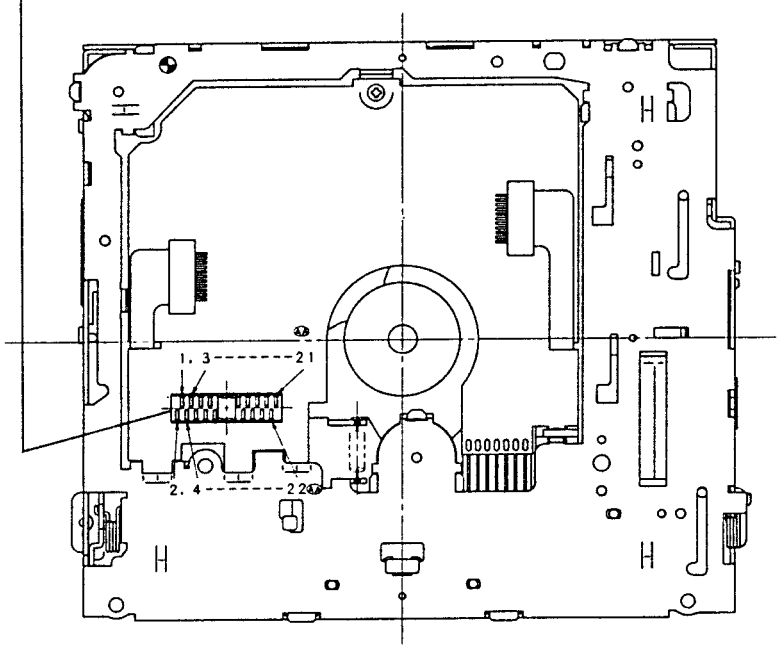
<Power circuit>
＜電気回路＞

1. Block diagram
1. ブロックダイアグラム

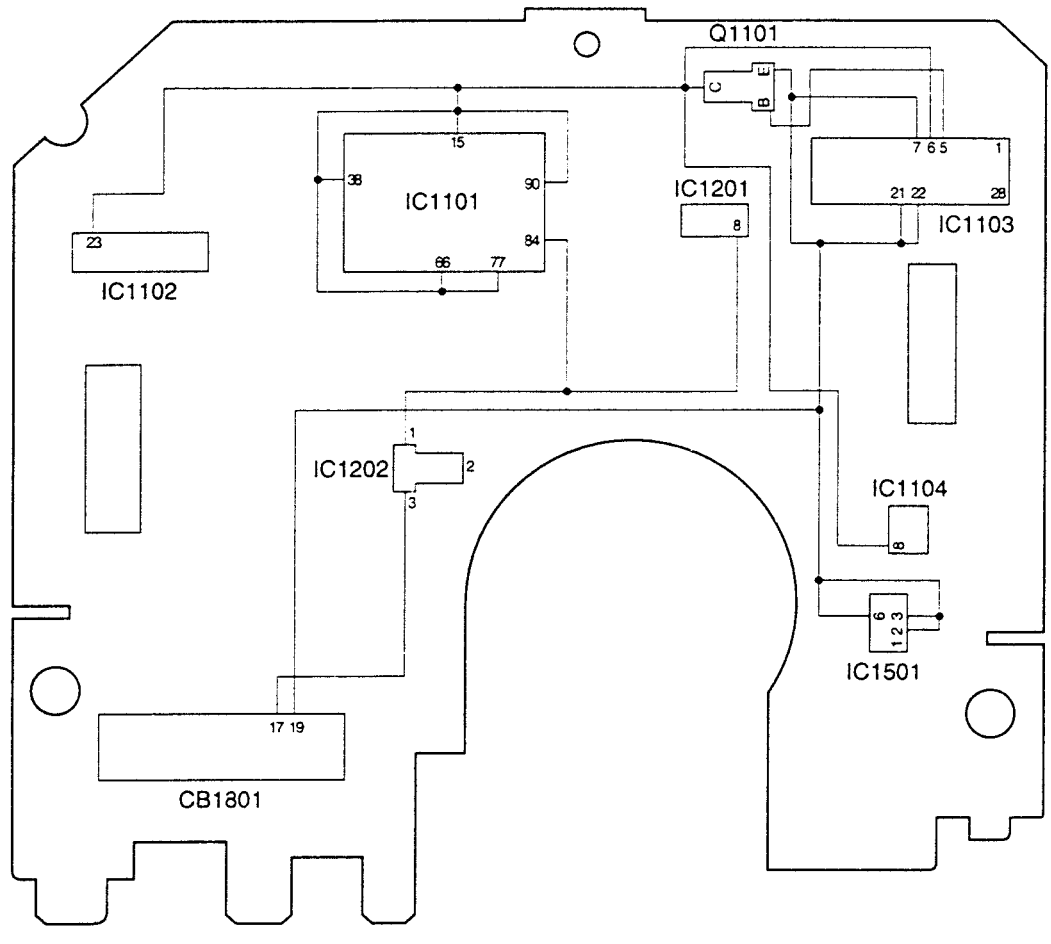


2. Connector terminal location diagram
2. コネクター端子配列表

PIN NO.	1	2	3	4	5	6	7	8	9	10	11
	RESET	SW-A	SW-B	SW-C	SW-D	LIMIT SW	NC	BUS0	BUS1	BUS2	BUS3
PIN NO.	12	13	14	15	16	17	18	19	20	21	22
	/CCE	BUCK	LOAD-FWD	/LOCK	LOAD-RWD	AUDIO +B	L	SERVO +B	S. GND	GND	R

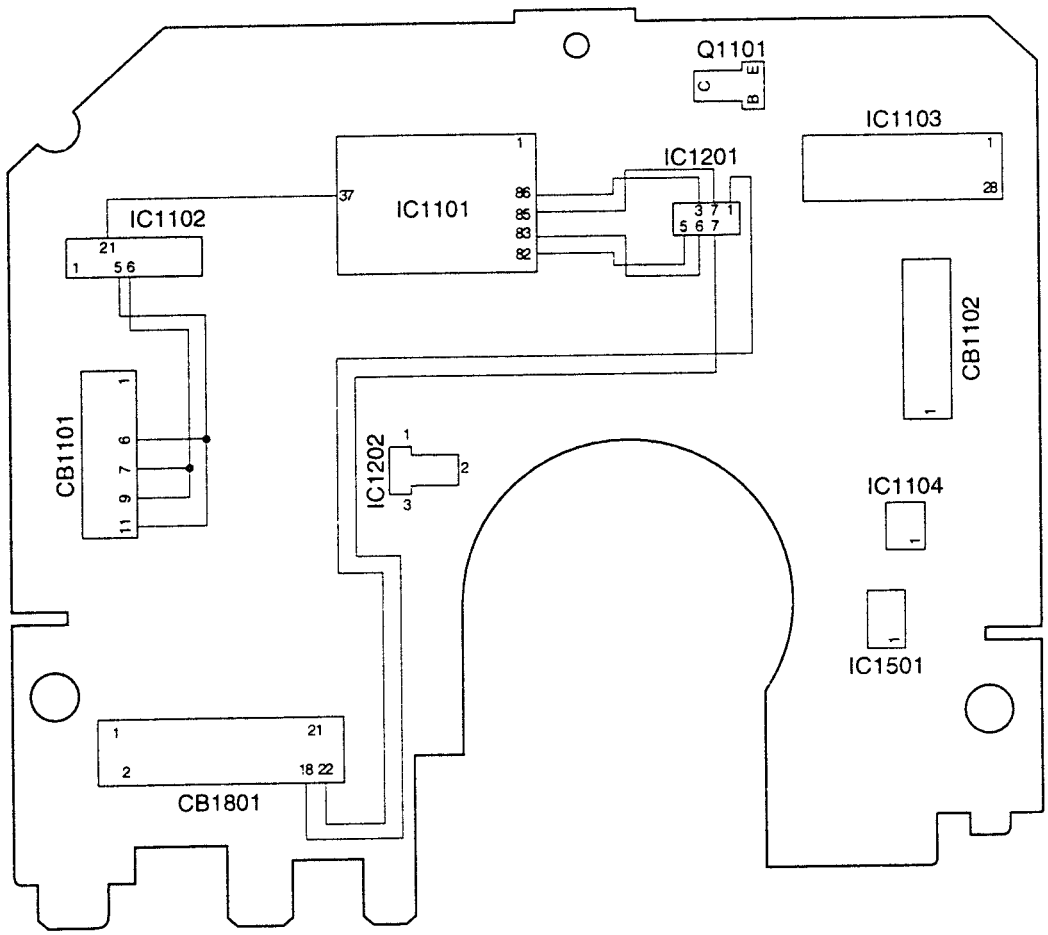


3. Power supply line
3. 電源ライン



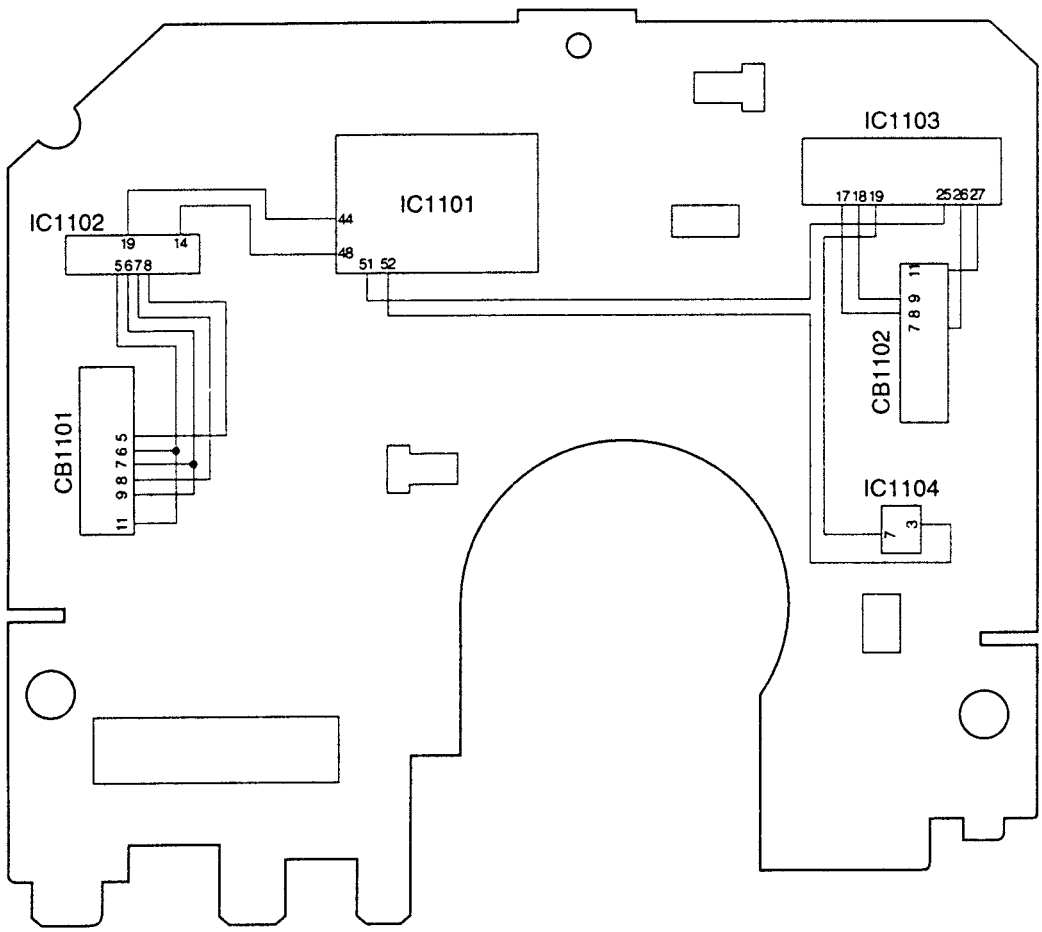
Ref. No.	Function/機能	Input terminal/入力端子	Voltage/電圧
IC1101	Servo processor	⑬ ㊳ ㊻ ㊼ ㊹ ㉜	5V
IC1102	RF AMP F/T error AMP	㉓	5V
IC1103	Servo driver	⑦ ㉑ ㉒	7V
IC1104	Tracking error AMP	⑧	5V
IC1201	Low pass filter	⑧	5V
IC1202	Regulator	③	9V
Q1101	Regulator	Emitter	7V
IC1501	Loading motor driver	② ③ ⑥	7V

4. Signal line
4. 信号ライン



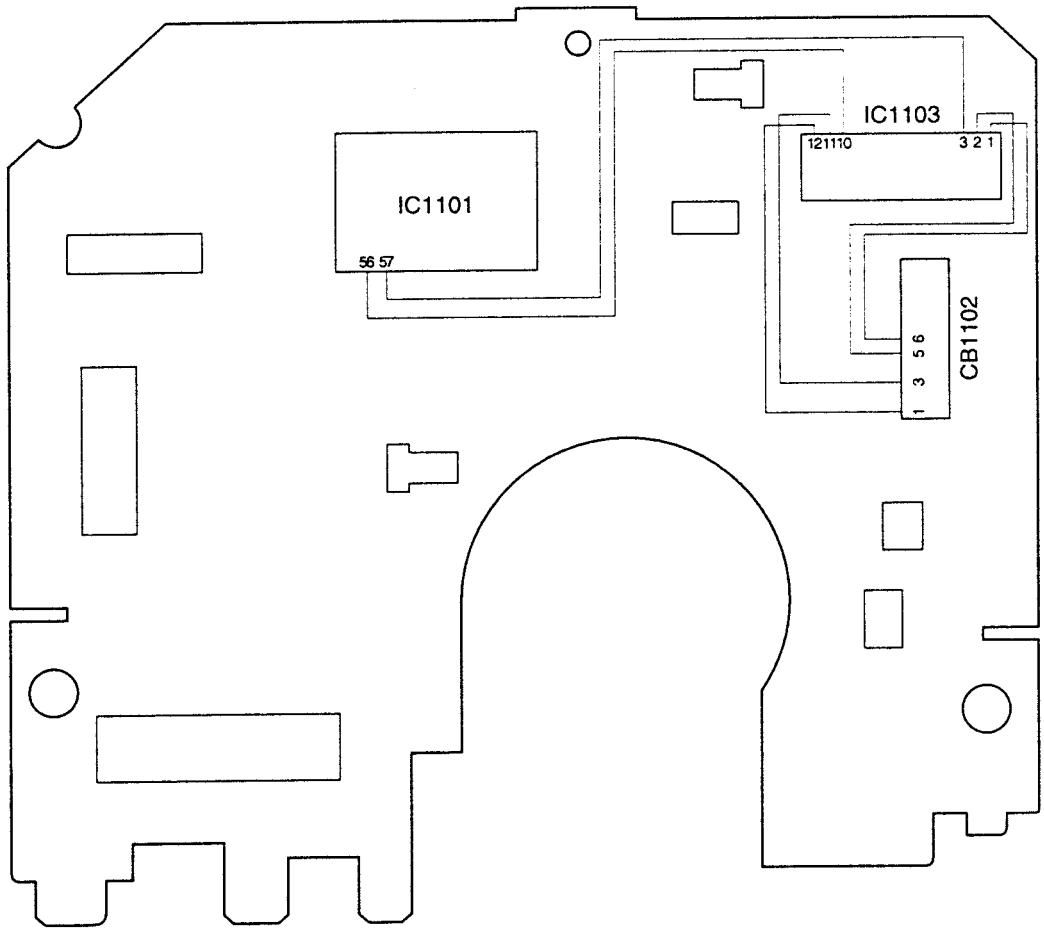
Ref. No.	Function/機能	Input terminal/入力端子	Output teminal/出力端子
IC1101	Servo processor	㉗	㉜ ㉝ ㉟ ㊱
IC1102	RF AMP F/T error AMP	⑤ ⑥	㉑
IC1201	Low pass filter	② ③ ⑤ ⑥	① ⑦

5. Focus/Tracking control
5. フォーカストラッキングコントロール



Ref. No.	Function/機能	Input terminal/入力端子		Output teminal/出力端子	
		Focus	Tracking	Focus	Tracking
IC1101	Servo processor	㊹	㊽	㊶	㊷
IC1102	RF AMP F/T error AMP	⑤ ⑥	⑦ ⑧	⑲	⑭
IC1103	Servo driver	㉕	⑬	㉖ ㉗	⑰ ⑱
IC1104	Tracking error AMP		③		⑦

6. Sled/Spindle control
6. スレッド／スピンドルコントロール



Ref. No.	Function/機能	Input terminal/入力端子		Output teminal/出力端子	
		Sled	Spindle	Sled	Spindle
IC1101	Servo processor			㊼	㊻
IC1103	Servo driver	③	⑩	① ②	⑪ ⑫

Component Disassembly and Assembly Notes
機能部品の分解方法及び組立上の注意

1. Switch/Motor P.C.Board disassembly

(1) Remove two screws ① and the spring ②, remove the Assy., Chassis Top. (See Figure 1)

(2) Remove two springs ③, remove the Assy., Arm Disc Guide. (See Figure 1)

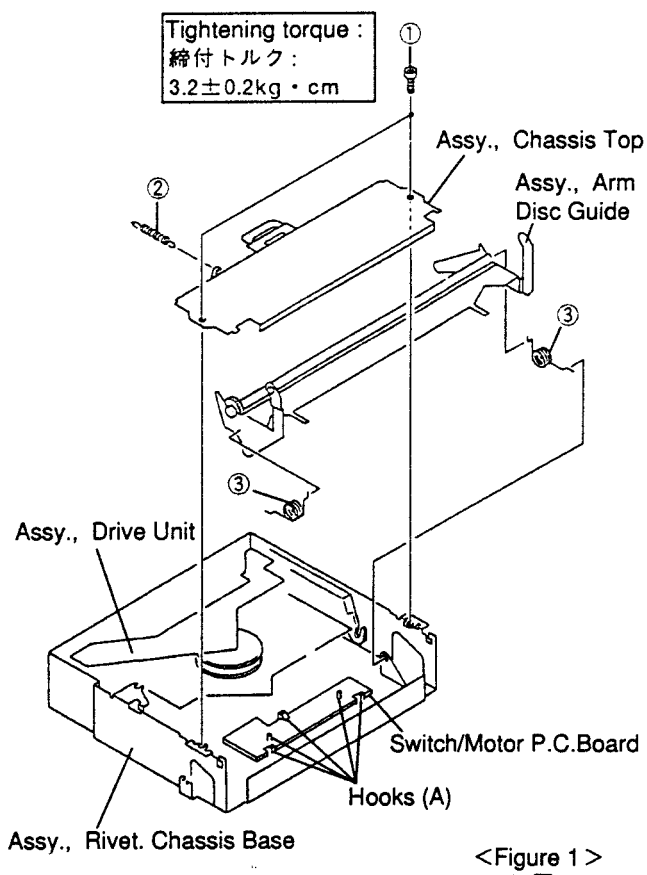
(3) Remove five Hooks (A), the parallel wire and two wires. (See Figure 1)
The Switch/Motor P.C.Board can be removed.

1. スイッチ／モーター基板の分解方法

(1) 2本のネジ①とスプリング②を外し、シャーシ・トップ組立を外します。(1図参照)

(2) 2本のスプリング③を外し、アーム・ディスク・ガイド組立を外します。(1図参照)

(3) 5箇所のフック (A)、パラレル・ワイヤー、2本のワイヤーを外します。
以上で、スイッチ／モーター基板は外れます。



<Figure 1>
<1図>

2. DP-Main P.C.Board disassembly

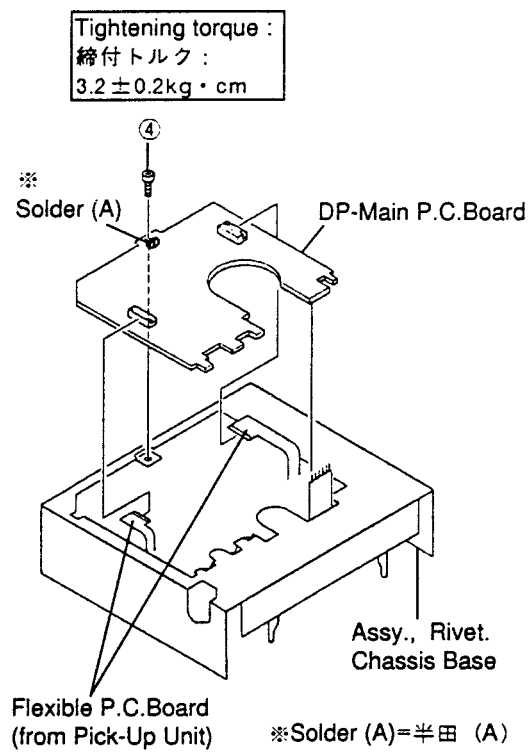
(1) Remove the solder (A) and a screw ④.
(See Figure 2)

(2) Remove all connectors connected to the DP-Main P.C.Board.
The DP-Main P.C.Board can be removed.

2. DP-メイン基板の分解方法

(1) 半田 (A) と1本のネジ④を外します。
(2図参照)

(2) DP-メイン基板につながる全てのコネクターを外します。
以上で、DP-メイン基板は外れます。



<Figure 2>
<2図>

3. Assy., Drive Unit disassembly

(1) Remove the Lever End, the Slider Lock (R) and the Arm Lock (R). (See Figure 3)

(2) Remove three springs ⑤, pull up the Assy., Drive Unit. (See Figure 3)
The Assy., Drive Unit can be removed.

<Assembly note>

- Move the Slider Load fully in the direction indicated by the arrow. (See Figure 3)

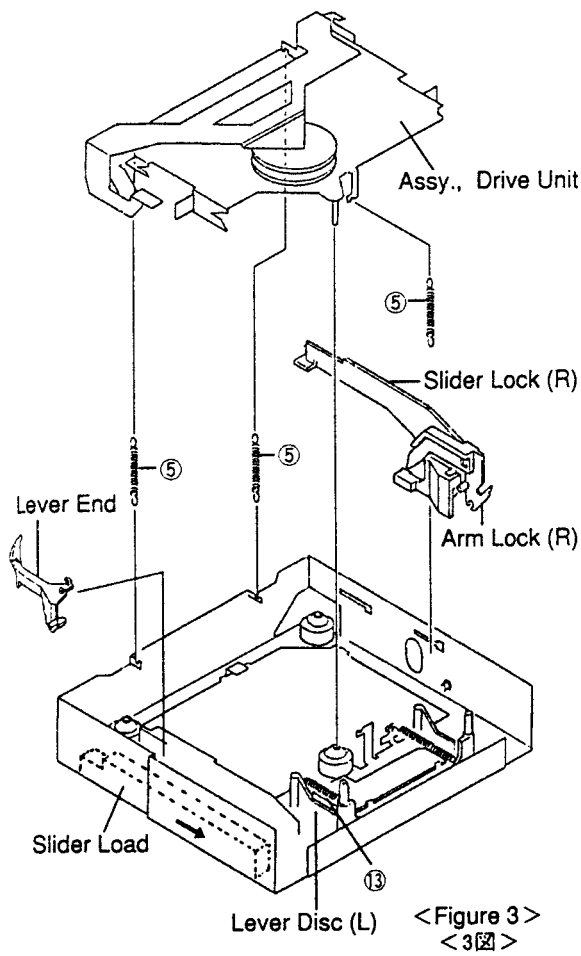
3. ドライブ・ユニット組立の分解方法

(1) レバー・エンド、スライダー・ロック（R）、アーム・ロック（R）を外します。(3図参照)

(2) 3本のネジ⑤を外し、ドライブ・ユニット組立を外します。(3図参照)
以上で、ドライブ・ユニット組立は外れます。

<組立上の注意>

- スライダー・ロードが矢印の方向へ一杯に移動した状態で組み立てて下さい。(3図参照)



<Figure 3>
<3図>

4. Assy., Motor Spindle (M1302) disassembly

(1) Remove the spring ⑥, remove the Assy., Arm Clamp. (See Figure 4)

(2) Move the Pick-Up Unit (HD1201) fully in the direction indicated by the arrow, remove two screws ⑦. (See Figure 4)

(3) Remove two wires connected to the FPC DP-L Control P.C.Board.
The Assy., Motor Spindle (M1302) can be removed.

<Assembly notes>

- Always wear an electrostatic discharge band.
- Never touch the lens of the Pick-Up Unit.

4. モーター・スピンドル組立（M1302）の分解方法

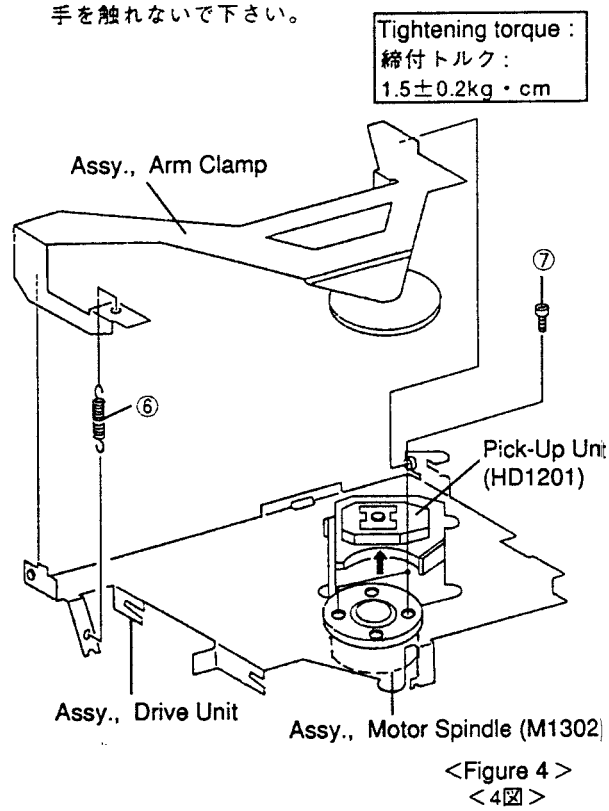
(1) スプリング⑥を外し、アーム・クランプ組立を外します。(4図参照)

(2) ピック・アップ・ユニット(HD1201)を矢印の方向へ一杯に動かし、2本のネジ⑦を外します。(4図参照)

(3) FPC DP-Lコントロール基板につながるワイヤーを外します。
以上で、モーター・スピンドル組立（M1302）は外れます。

<組立上の注意>

- 静電バンドを付けて作業して下さい。
- ピック・アップ・ユニットのレンズには絶対に手を触れないで下さい。



<Figure 4>
<4図>

5. Pick-Up Unit (HD1201) disassembly

● Wear an electrostatic discharge band, when disassembling the Pick-Up Unit.
Do not touch the lens or the P.C.Board.

(1) Remove two screws ⑧, remove the Spring Nut (A), (B). (See Figure 5)

(2) Remove two Hooks (B), remove the FPC DP-L Control P.C.Board. (See Figure 5)

(3) Remove a screw ⑨, remove the Spring Multi. (See Figure 5)
The Shaft Pick-Up (2) can be removed.

(4) Remove a screw ⑩, remove the Shaft Pick-Up (1). (See Figure 5)

(5) Remove the Solder (B) connected between the FPC DP-L Control P.C.Board and the Flexible P.C.Board (from the Pick-Up Unit). (See Figure 5-3)
NOTE : Do not cut the Flexible P.C.Board by removing the Solder (B).
The Pick-Up Unit (HD1201) can be removed.

<Assembly notes>

● Always wear an electrostatic discharge band.

● Never touch the lens or the P.C.Board of the Pick-Up Unit.

● Form two Flexible P.C.Boards from the Pick-Up Unit as shown in Figures 5-1and 5-2.

5. ピック・アップ・ユニット（HD1201）の分解方法

● ピック・アップ・ユニットを外す際は、静電バンドを付けて作業して下さい。また、レンズや基板には手を触れないで下さい。

(1) 2本のネジ⑧を外し、スプリング・ナット（A）、（B）を外します。(5図参照)

(2) 2箇所のフック（B）を外し、FPC DP-Lコントロール基板を外します。(5図参照)

(3) 1本のネジ⑨を外し、スプリング・マルチを外します。(5図参照)
以上で、シャフト・ピック・アップ（2）は外せます。

(4) 1本のネジ⑩を外し、シャフト・ピック・アップ（1）を外します。(5図参照)

(5) FPC DP-Lコントロール基板とフレキシブル基板を接続している半田（B）を外します。(5-3図参照)
注）半田（B）を外す際に、フレキシブル基板を損傷しない様、注意して下さい。
以上で、ピック・アップ・ユニット（HD1201）は外れます。

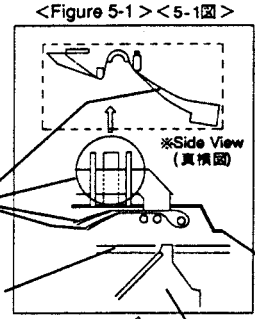
<組立上の注意>

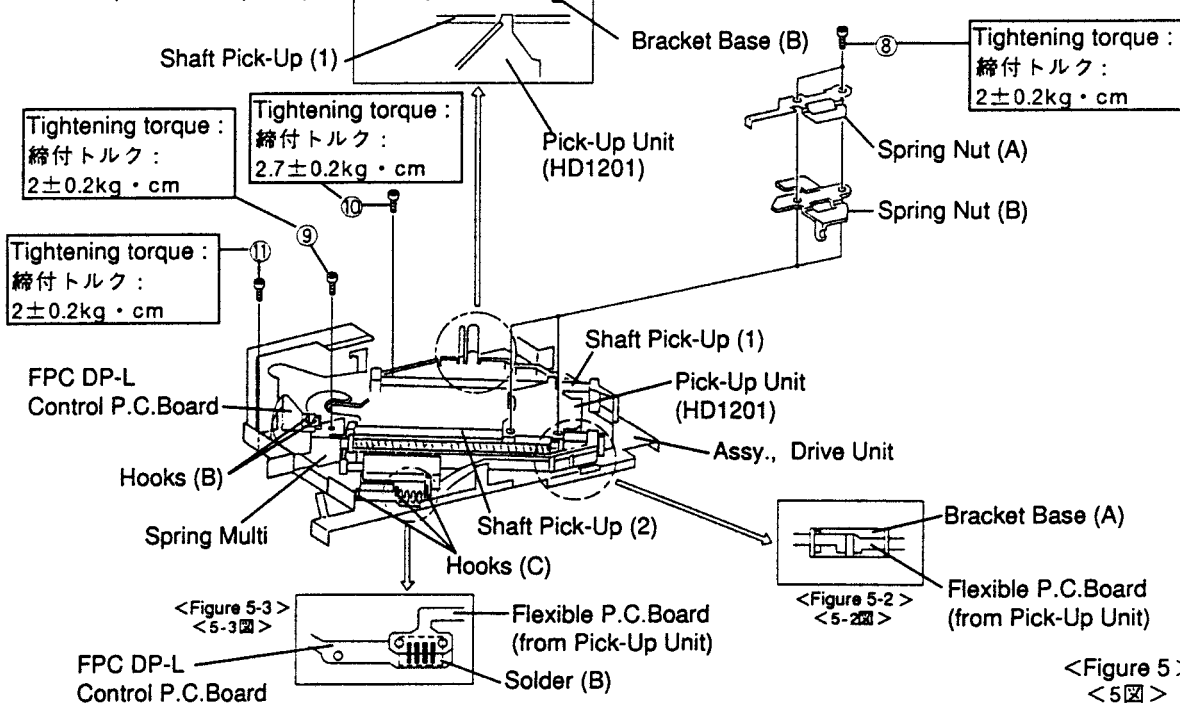
● 静電バンドを付けて作業して下さい。

● ピック・アップ・ユニットのレンズや基板には絶対に手を触れないで下さい。

● ピック・アップ・ユニットから出ている2本のフレキシブル基板のフォーミングは5-1,5-2図の様にして下さい。

<Figure 5-1 ><5-1図>





<Figure 5 >
<5図>

6. Assy., Motor Sled (M1303) disassembly

(1) Remove two screws ⑫ (See Figure 6), remove three Hooks (C) (See Figure 5) and a screw ⑪ (See Figure 5).
The Assy., Motor Sled (M1303) can be removed.

＜Assembly notes＞

- Mount the Assy., Motor Sled (M1303) so the seal side is correct. (See Figure 6-1)
- Form the FPC DP-L Control P.C.Borad as shown in Figure 6-1.

6. モーター・スレッド組立（M1303）の分解方法

(1) 2本のネジ⑫（6図参照）を外し、3箇所のフック（C）（5図参照）と1本のネジ⑪（5図参照）を外します。
以上で、モーター・スレッド組立（M1303）は外れます。

＜組立上の注意＞

- モーター・スレッド組立（M1303）は、捺印の位置に注意して取り付けて下さい。(6-1図参照)
- FPC DP-Lコントロール基板のフォーミングは6-1図の様にして下さい。

7. Assy., Motor-Worm (M1301) disassembly

(1) Remove the spring ⑬, remove the Lever Disc (L). (See Figure 3)

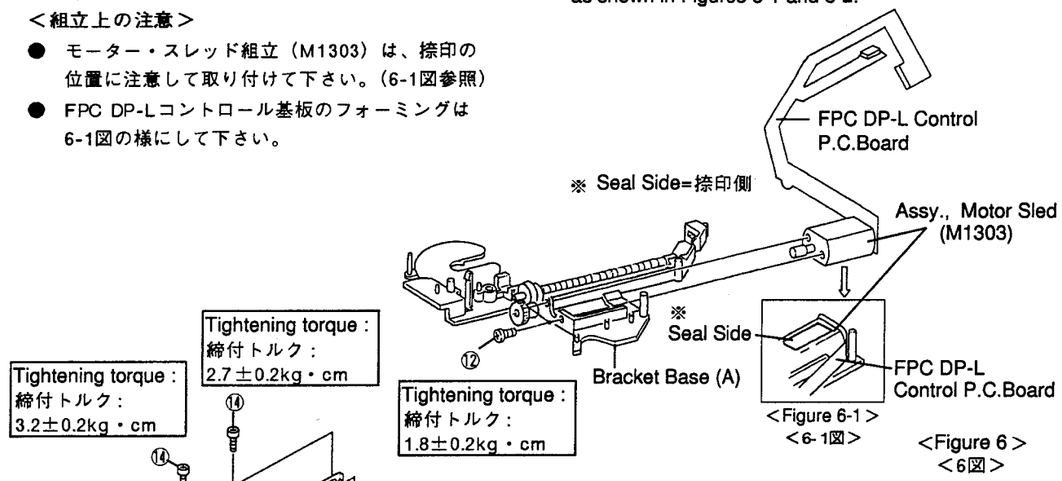
(2) Remove three screws ⑭, remove the Bracket Motor-Wire. (See Figure 7)
The Assy., Motor-Worm (M1301) with the Slider Lock (L) and the Assy., Bracket Motor can be removed completely.

(3) Remove the spring ⑮, remove the Slider Lock (L) and the Arm Lock (L). (See Figure 8)

(4) Remove two screws ⑯. (See Figure 8)
The Assy., Motor-Worm (M1301) can be removed.

＜Assembly notes＞

- Mount the Assy., Motor-Worm (M1301) so the seal side is correct. (See Figure 8-1)
- Form the wires of Assy., Motor-Worm (M1301) as shown in Figures 8-1 and 8-2.



<Figure 6-1 > <6-1図>

<Figure 6 > <6図>

<Figure 7 > <7図>

7. モーター・ウォーム組立（M1301）の分解方法

(1) スプリング⑬を外し、レバー・ディスク（L）を外します。(3図参照)

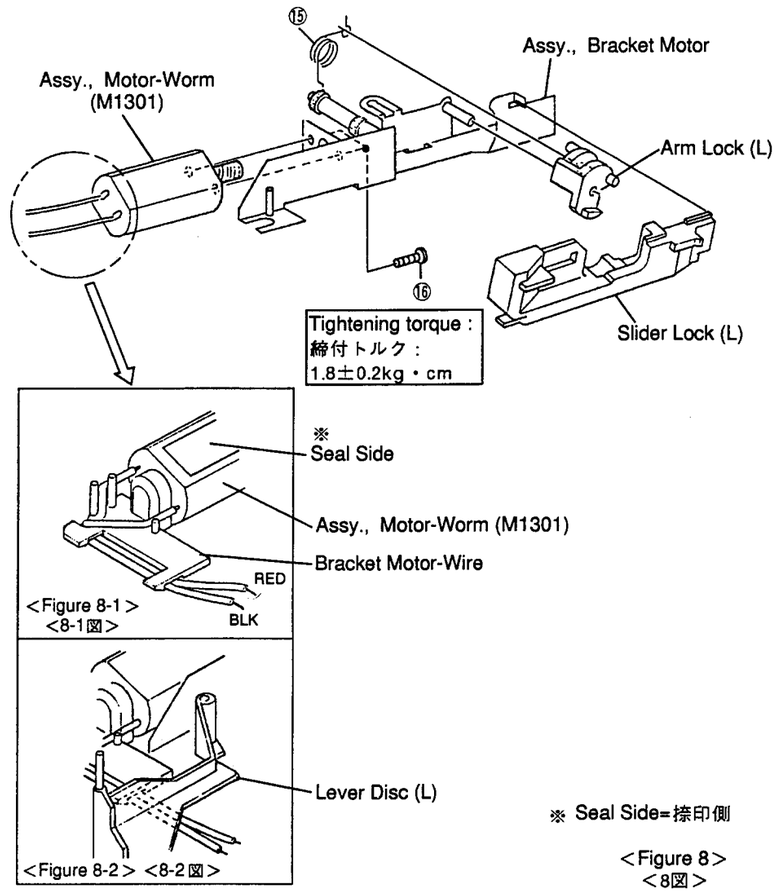
(2) 3本のネジ⑭を外し、ブラケット・モーター・ワイヤーを外します。(7図参照)
モーター・ウォーム組立（M1301）は、スライダー・ロック（L）、ブラケット・モーター組立が付いた状態で一緒に外れます。

(3) スプリング⑮を外し、スライダー・ロック（L）とアーム・ロック（L）を外します。(8図参照)

(4) 2本のネジ⑯を外します。(8図参照)
以上で、モーター・ウォーム組立（M1301）は外れます。

＜組立上の注意＞

- モーター・ウォーム組立（M1301）は、捺印の位置に注意して取り付けて下さい。(8-1図参照)
- モーター・ウォーム組立（M1301）のフォーミングは、8-1, 8-2図の様にして下さい。



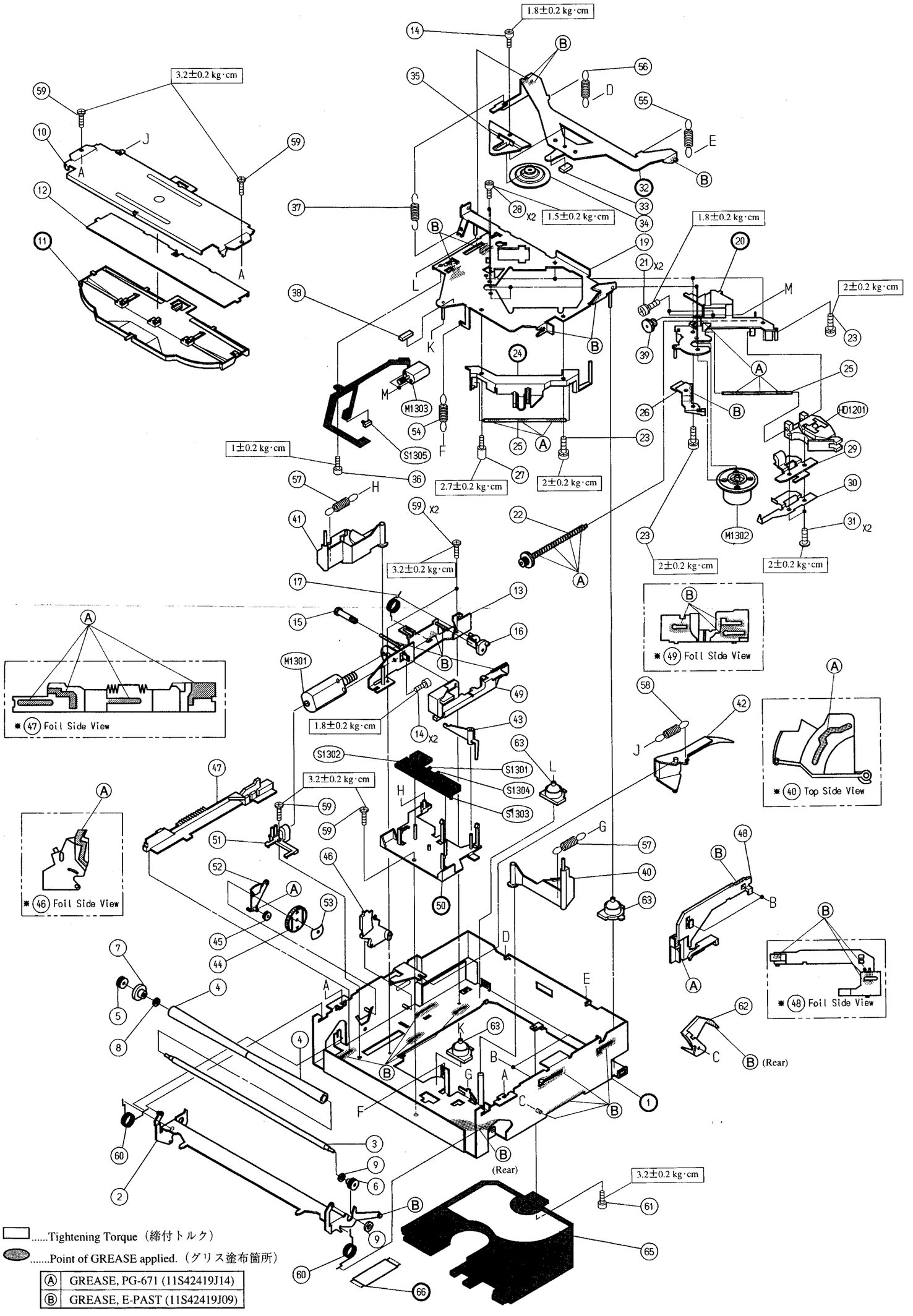
<Figure 8-1 > <8-1図>

<Figure 8-2 > <8-2図>

※ Seal Side=捺印側

<Figure 8 > <8図>

Exploded View (CD Mechanism)



.....Tightening Torque（締付トルク）

.....Point of GREASE applied.（グリス塗布箇所）

Ⓐ	GREASE, PG-671 (11S42419J14)
Ⓑ	GREASE, E-PAST (11S42419J09)

CD Mechanism Assembly Parts List

NOTE:No parts number on parts list are not supplied.

Symbol No.	Index	Part No.	Description
2	5-G	01B70635W01	Assy., Rivet Arm - Disc
3	4-G	47A70613W01	Shaft, Roller
4	4-F	49A71614W01	Roller, DP - L
5	5-F	43A70630W01	Bush, Roller (R)
6	5-G	43A70631W01	Bush, Roller (L)
7	5-F	44A70617W01	Gear (C)
8	5-F	04S40075G03	Washer, Flat (M1.7)
9	4-G	04S40075G09	Washer, Flat (M2.6)
10	5-B	27C70602W01	Chassis, Top
12	5-B	15C70632W01	Guide, Top
13	3-D	01A70636W01	Assy., Rivet Bracket Motor
14		03S94385F19	Screw, Nylok Pan (M2 ×2.5)
15	4-D	44B80632W01	Gear, Idler - S
16	3-D	45B70624W01	Arm, Lock (L)
17	4-D	41A71510W01	Spring, Arm
19	2-B	01A70580W01	Assy., Chassis Pick - Up
21	2-B	03S40014G07	Screw, W / Washer (M2 ×4)
22	3-D	01V73300W39	Assy., Shaft Screw
23		03S40014G84	Screw, W / Washer (M2 ×6.5)
25		47A50698W01	Shaft, Pick - Up
26	2-C	41A70587W01	Spring, Multi
27	3-C	03A75516W02	Screw, Drive (M2 ×5)
28	3-B	03S94385F03	Screw, Nylok Pan (M1.7 ×4)
29	1-C	44B70592W01	Spring, Nut (B)
30	1-D	41A70586W01	Spring, Nut (A)
31	1-D	03S94385F25	Screw, Nylok Flat (M2 ×3.5)
33	2-B	43A41656W01	Spacer, UHMW - PE
34	2-B	01V73300W37	Assy., Table Clamper
35	3-A	07A70588W01	Stopper, Clamp
36	3-C	03S72235F76	Screw, Pan (M2 ×2)
37	4-B	41B70640W06	Spring, Pull
38	4-B	75S50638W99	Rubber, Pad Chassis
39	2-C	44A70590W01	Gear, Middle
40	2-E	45B70626W01	Lever, Disc (R)
41	4-D	45B70627W01	Lever, Disc (L)
42	2-E	45B70628W01	Lever, End
43	3-E	45A70629W01	Lever, Switch
44	4-F	44A70615W01	Gear (A)
45	4-F	44A70616W01	Gear (B)
46	4-E	45B70619W01	Lever, Cam
47	4-E	45C70620W01	Slider, Load
48	2-E	45B70621W01	Slider, Lock (R)
49	3-E	45B70622W01	Slider, Lock (L)
51	4-E	07A70633W01	Bracket, Motor - Wire
52	4-E	01A70637W01	Assy., Rivet Arm Timing
53	4-F	41A70606W01	Spring, Washer
54	3-C	41B70640W01	Spring, Pull
55	2-A	41B70640W02	Spring, Pull
56	2-A	41B70640W03	Spring, Pull
57		41B70640W04	Spring, Pull
58	2-D	41B70640W05	Spring, Pull
59		03S38013W29	Screw, Flat (M2 ×3.5)
60		41A71509W01	Spring, Roller
61	2-G	03S38013W22	Screw, Pan (M2 ×4)
62	2-F	45B70623W01	Arm, Lock (R)
63		75C71171W02	Damper, DP - L
65	2-G	14A80680W01	Insulator, DP - Main

Miscellaneous

HD1201		88T55261W01	Pick - Up Unit
M1301		01V73300W33	Assy., Motor - Worm (7V - 370mA)
M1302		01V73300W35	Assy., Motor Spindle (2V- 90mA)
M1303		01V73300W38	Assy., Motor Sled (7V - 370mA)
S1301		40T25956W02	Switch, Detector (DISC CHUCKING POSITION)
S1302		40T25956W02	Switch, Detector (DISC LOAD)
S1303		40T25956W01	Switch, Detector (DISC LOAD)
S1304		40T25956W02	Switch, Detector (DISC END)
S1305		40T71025F03	Switch, Detector (LIMIT)

ALPINE

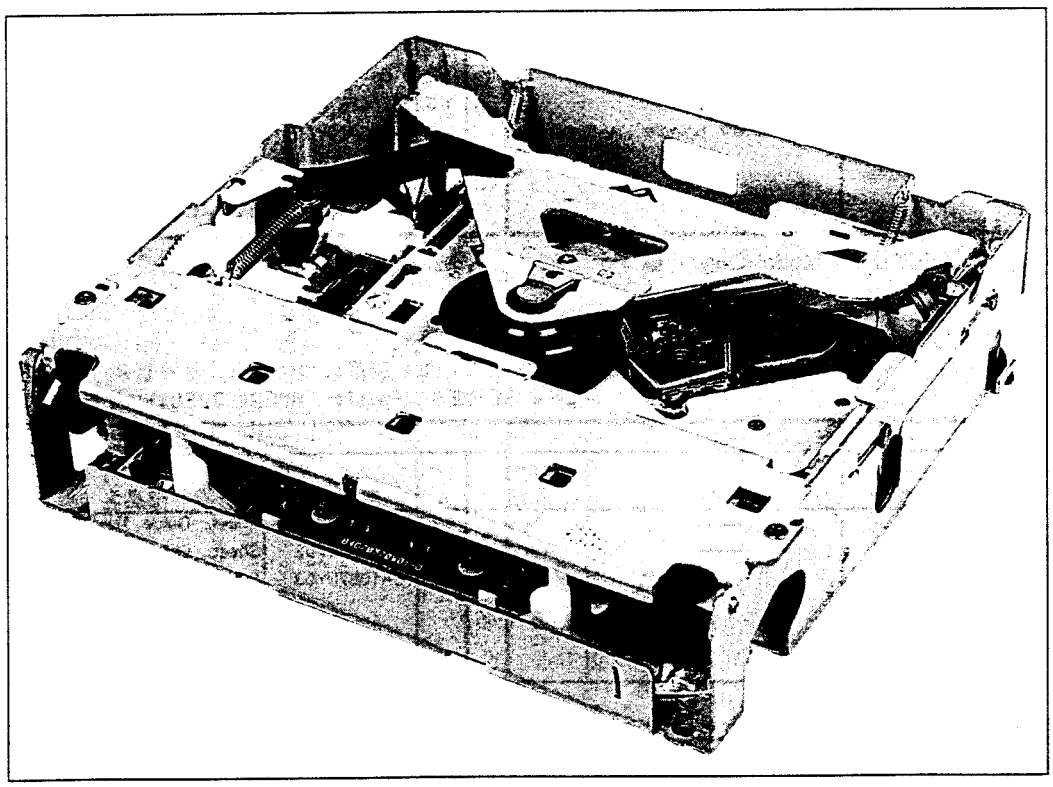
SERVICE MANUAL

V23251

CD Player Mechanism

ADDENDUM & REVISED (III)

- This manual is described on DP23L05A/DP24L05A only. The DP23L05A/DP24L05A is developed from DP23L010. For information that is not mentioned in this service manual, refer to the Service Manual • DP-L SERIES (68E24872S01). V19009 30
- 当マニュアルはDP23L05A/DP24L05Aについてのみ記載しております。又、DP23L010がベースモデルとなっておりますので、相違部分のみ記載しております。詳細についてはDP-L SERIES (68E24872S01) を参照願います。



DP-L SERIES

Contents

CD Mechanism Assembly Parts List (Only Difference) 2
Exploded View (CD Mechanism) ..... 3 to 4

Mechanism Function Description
Component Disassembly and Assembly Notes
Refer to the Service Manual for DP-L Series (Part No. 68E23246S01).

Cabinet Assembly Parts List

NOTE : For the parts not mentioned, refer to the Service Manual for DP-L SERIES (Part No. 68E24872S01).

Model	DP-L SERIES				DP23L05A/DP24L05A		
Symbol No.	Index	Part No.	Description		Index	Part No.	Description
67		—	—		4-B	75A10573Y01	Sheet, Guide Top
68		—	—		4-C	75A10573Y02	Sheet, Guide Top
69		—	—		2-B	75A10573Y03	Sheet, Guide Top
Miscellaneous							
HD1201	1-C	81B81296W01	Pick-Up Unit	○	1-C	81B81296W02	Pick-Up Unit
or	1-C	—	—	○	1-C	81B10890Y01	Pick-Up Unit
HD1201	1-C	81B81296W01	Pick-Up Unit	●	1-C	88T55261W01	Pick-Up Unit
M1302	2-D	01V94200W03	Assy., Motor Spindle (3V-90mA)	●	2-D	01V73300W35	Assy., Motor Spindle (2V-90mA)

NOTE : ○: For DP23L05A Model Only, ●: For DP24L05A Model Only, Others : Common.

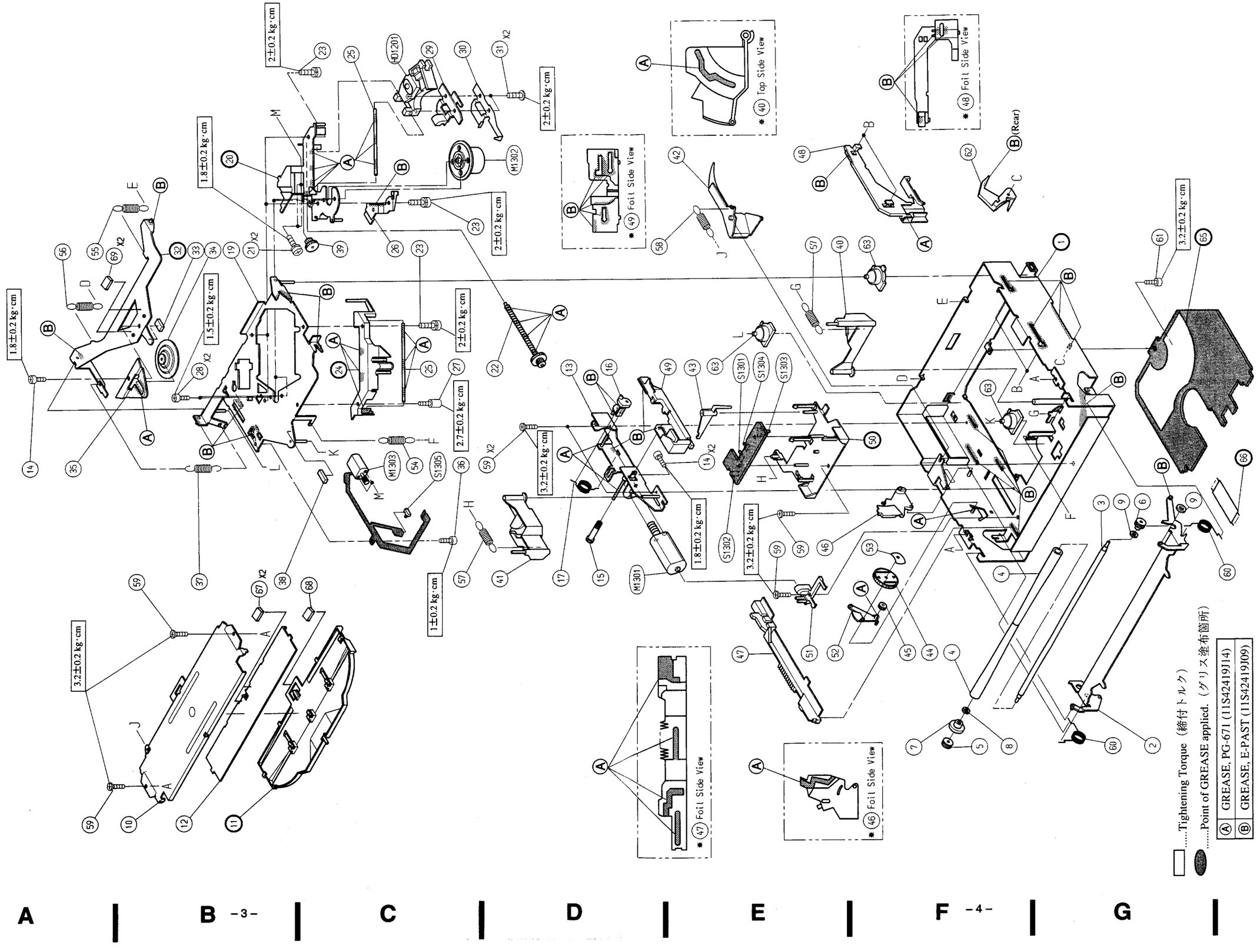
キャビネット関係部品相違表

※ 記載されていない部品については、サービスマニュアル・DP-L SERIES (Part No. 68E24872S01) を参照願います。

Model	DP-L SERIES				DP23L05A/DP24L05A				
記号	索引	部品番号	部品名	標準卸価格		索引	部品番号	部品名	標準卸価格
67		—	—	—		4-B	75A10573Y01	Sheet, Guide Top	45
68		—	—	—		4-C	75A10573Y02	Sheet, Guide Top	45
69		—	—	—		2-B	75A10573Y03	Sheet, Guide Top	45
その他の電気部品									
HD1201	1-C	81B81296W01	Pick-Up Unit	3,350	○	1-C	81B81296W02	Pick-Up Unit	—
or	1-C	—	—	—	○	1-C	81B10890Y01	Pick-Up Unit	—
HD1201	1-C	81B81296W01	Pick-Up Unit	3,350	●	1-C	88T55261W01	Pick-Up Unit	3,350
M1302	2-D	01V94200W03	Assy., Motor Spindle (3V-90mA)	1,530		2-D	01V73300W35	Assy., Motor Spindle (3V-90mA)	1,440

注記 : ○ : DP23L05A モデル専用, ● : DP24L05A モデル専用, その他 : 共通

Exploded View (CD Mechanism)



A | B -3- | C | D | E | F -4- | G